

Public Utilities

FORTNIGHTLY



Volume 53 No. 8



April 15, 1954

THE ADJUSTMENT CLAUSE, AN AID TO RATE REGULATION

By Orrin S. Vogel

« »

How the AT&T Finances Billion- Dollar Programs

By J. Louis Donnelly

« »

New Light on an Old Subject

By David E. Goggin

« »

Urban Transit Control and Financing Trends

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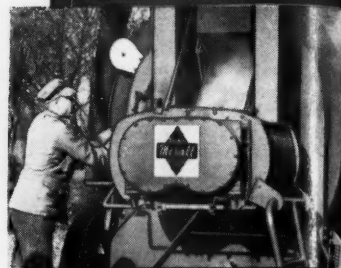
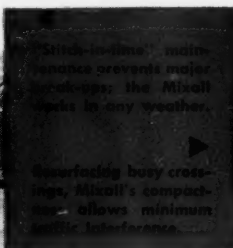
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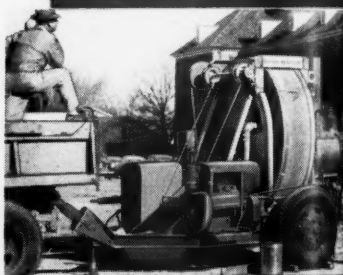
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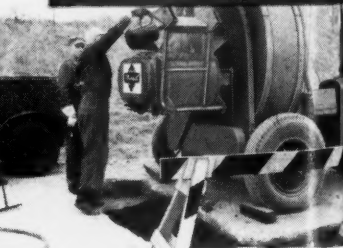
For parking lots, factory floors, on-the-job drying of aggregate, complete control of mix.



For playgrounds, tennis courts, roads and streets . . . scattered jobs . . . variations of mixes.



For playgrounds, tennis courts, roads and streets . . . scattered jobs . . . variations of mixes.



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Public Utilities

FORTNIGHTLY

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PUBLIC UTILITIES FORTNIGHTLY . . . stands for the federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a basis of nondiscriminatory taxation; for nondiscriminatory administration of laws; for nondiscriminatory taxation; in general—for the perpetuation of the enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied subjects. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by contributors.

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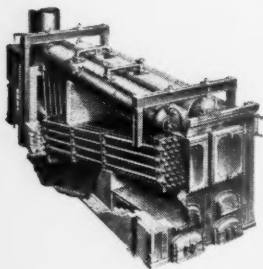
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View of B&W Boiler for
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Yet today that is an accomplished fact in such outstanding plants as the new Astoria Station of Consolidated Edison Company, where the second B&W boiler to serve a 180-megawatt unit went on the line last month.

Now we are celebrating Light's Diamond Jubilee, and reminding all Americans of the electrical progress that has been so helpful to everyone in the short 75 years since Edison's Menlo Park experiments produced the first practical incandescent electric light.

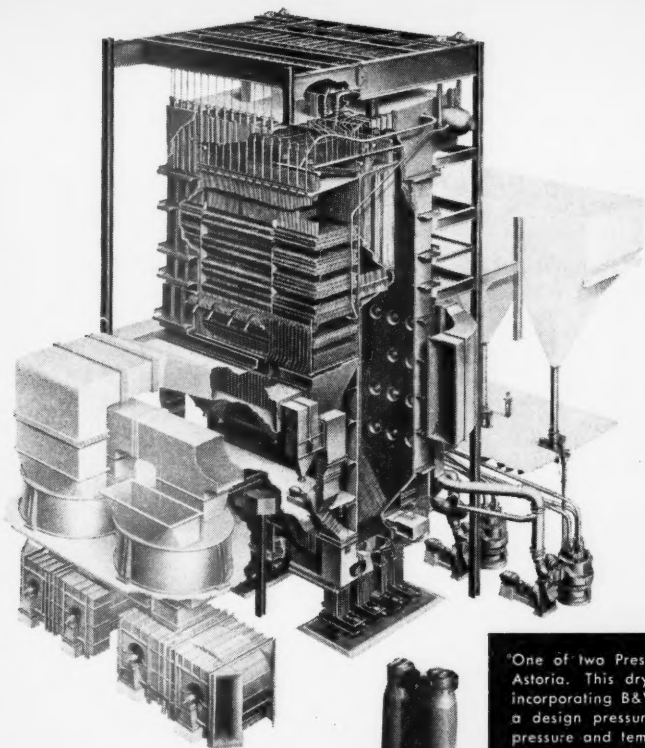
The public relations value of the Diamond Jubilee celebration is important, of course—and proper, too. But we at B&W believe that the electric power industry has good reason to celebrate the Diamond Jubilee for the sheer exuberance of looking back fondly and enthusiastically upon a great job well done—and of looking forward to a future that is limitless.

In only 75 years the lights that first glowed in Edison's Menlo Park Machine Shop have been multiplied by tens of millions across this country and the world. This could only have been accomplished by an industry so technically proficient and so dedicated to its public trust that each challenge has been met in turn, and each victory marked down as a foundation on which to build further.

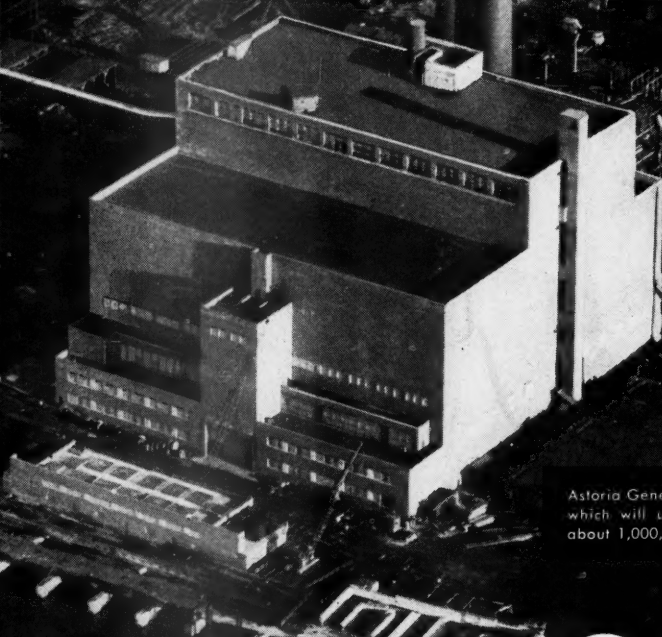
Having supplied Edison with his boilers for Menlo Park, and a few years later for his Pearl Street Station, we at B&W are proud of our own continuing technical contributions such as Cyclone Furnaces, Pressure Firing, Cyclone Steam Separators, Coal Pulverizers and Divided Furnaces, that have helped the utilities produce more power for more people at lower cost than power pioneers ever dreamed of.

We may well pause to reflect on Menlo Park and Astoria Station—each a significant date in power generation, a significance made greater by the fact that each points in the same direction—to an expanding future.





"One of two Pressure-Fired B&W Boilers installed at Astoria. This dry-bottom, Radiant Reheat Type unit incorporating B&W Divided-Furnace construction, has a design pressure of 2050 psi. Superheater outlet pressure and temperature are 1850 psi and 1000 F, with reheat to 1000 F. Designed steam output ranges between 1,200,000 and 1,370,000 lb per hr, depending upon type of fuel.



Astoria Generating Station of Consolidated Edison Co. which will ultimately have a generating capacity of about 1,000,000 kw.

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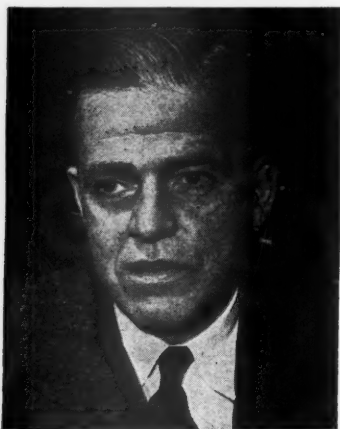


Pages with the Editors

FLEXIBILITY has long been one of the hallmarks of public utility regulation in the United States. Some students of the subject have even suggested that flexibility is responsible to a large extent for the success of public utility regulation in riding out the various economic storms and changing times through which our nation has passed.

CERTAINLY the U. S. Supreme Court has tried to make it clear in repeated decisions, that no one approach and no single formula has ever been found to embrace all of the requirements of equity and reasonableness and other ingredients of effective rate regulation, so as to be entitled to a conclusive presumption at all times and under all circumstances.

THIS does not mean that formulas are not useful or trustworthy under qualified circumstances with respect to their reasonable application. To distrust all formulas would be to go to the other extreme and impose a terrific burden of responsibility on the regulatory commissions for each and every rate case. It would virtually destroy the value of precedent and lessons learned from practical experience. The golden mean would seem to suggest that formulas are useful tools for those who know how to apply them, and supervise



J. LOUIS DONNELLY



ORRIN S. VOGEL

their effective operation in the interest of fairness and justice.

IN the battle of ideas, the question of utilizing the adjustment clause to cope with fluctuations in operating expenses has been worthy of thoughtful research and discussion. Recently we published an article suggesting that such clauses, whether used for fuel or extended to other operating expense items, could be carried too far, that they could undermine if not defeat responsible regulation through abuse in the form of indiscriminate application.

ADMITTEDLY, the responsibility for fixing a reasonable rate is primarily a job for the regulatory commission under the law of most states. It is not a job to be delegated or deputized or surrendered to automatic operations. In theory at least, every rate authorized by a regulatory commission must bear the imprimatur of that commission's judgment as to reasonableness and fairness under the controlling statute.

IN this issue we present another thoughtful discussion looking in the other direction. It approaches the adjustment or escape clause as a positive aid to regula-



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engineered to the job by Blaw-Knox in cooperation with utility engineers

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How we can assist you will naturally depend upon your specific needs. But always available to you and your consultants are the technical know-how and practical field experience of our engineers, acquired

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PAGES WITH THE EDITORS (Continued)

tion. Since the last prewar year of 1940, the cost of living has been doubled through a steadily rising price trend. But during that same period the cost of fuel oil used by some utilities has fluctuated greatly, reaching at times a level almost triple the prewar low price. The leading article in this issue is based on a study of such utility expense fluctuation and the use of various types of escalator clauses to adjust utility rates.

ORRIN S. VOGEL, author of this article on the adjustment clause, is an official of the Florida Power Corporation, in charge of that utility's rate case preparation. He is a graduate engineer (EE, Rensselaer Polytechnic Institute) who has also taken postgraduate work (Georgia Tech) in accounting, public administration, economics, and banking. His professional background has been in both the regulatory and operating utility fields. He started out as a valuation engineer in New York city and was later employed as a consultant by the Georgia Power Company, reporting on gas, electric, and transit properties. In 1937, he joined the staff of the Georgia Public Service Commission, heading its division of valuation and rates until June, 1947, when he was placed in charge of the rate department of the Florida Power Corporation.

* * * *

SINCE the end of World War II, the American Telephone and Telegraph Company has been engaged in a series of record-breaking security issues, forming part of a \$10 billion program for financing plant to meet the unprecedented demand by the people of the United States for telephone service. The problem of distributing these tremendous issues has challenged all the "know-how" and resourcefulness of the Bell system experts.

BEGINNING on page 474, J. LOUIS DONNELLY, of the editorial staff of the *New York Journal of Commerce*, describes the steps taken to cope with financial operations of this magnitude. He tells how and why they go off so smoothly that AT&T has been able to sell to its shareholders and investors more than \$2.6 billion worth of convertible debentures



DAVID E. GOGGIN

during the postwar period. This is an article which will interest all financial men, as well as those connected with utility companies having large financial operations pending or in prospect.

* * * *

HAS the federal government actually discovered a way to make and serve electricity to the public cheaper or more efficiently than a privately owned utility? This is an old subject but it is approached in a new and objective way by DAVID E. GOGGIN, rates and research assistant of the Wisconsin Public Service Corporation, in his article "New Light on an Old Subject," beginning on page 479.

BORN in Milwaukee in 1905, Mr. GOGGIN started out as a Western Union messenger boy to supplement his education, which was eventually extended to accounting and economic courses at Marquette University and the University of Wisconsin Extension Division. He joined the Wisconsin Public Service Corporation in 1923 as an accountant, became a statistician in 1929, and a rates and research assistant in 1944. He has been active in the Wisconsin Utilities Association and a close follower of the public *versus* private power controversy.

THE next number of this magazine will be out April 29th.

The Editors



For Commercial applications . . . The Univac Electronic-Computing System

How to choose the electronic system that fits your needs exactly!

Look at the price tag on any large-scale electronic-computing system and you instinctively ask:

Which of the available systems is best for my work . . . how soon will it pay for itself . . . shall I buy outright, or simply utilize a computing center?

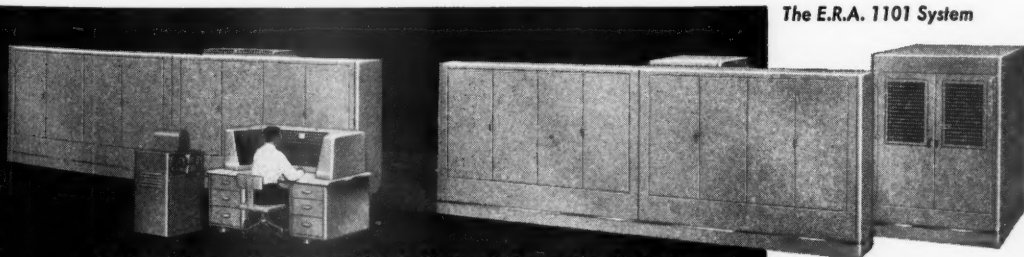
Because such questions can only be answered by you and your staff, we suggest this practical, two-phased approach:

1) *Test the System on an actual job.* Let the Univac or the E.R.A. System solve one of your data-processing problems on a service-fee basis. If you like the way the

system works, and the time and money it saves, then . . .

2) *Investigate electronic methods.* Send select groups of key men to our informative training courses in electronic-computer systems and methods. The courses are conducted by experienced computer-application engineers . . . cover commercial and scientific data-processing . . . include both Remington Rand and competitive electronic systems and methods.

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Coming IN THE NEXT ISSUE



NIAGARA SHOULD BE DEVELOPED THROUGH PRIVATE ENTERPRISE

Last July, before the Senate Public Works Committee, New York's Governor Dewey, among others, made several points in support of the construction of Niagara hydro-electric development by the state of New York. The governor was opposing construction by five privately owned electric utilities in that state, as provided in the Capehart-Martin-Miller Bill. In this article, Senator Homer E. Capehart (Republican, Indiana) has made a careful refutation of the Dewey thesis, going back over the political history of state policy and statutory development with respect, not only to Niagara but to the project with which it is so frequently confused, the St. Lawrence hydro-electric development.

TRAFFIC CRISIS—IS SUBSIDIZED PARKING THE ANSWER?

The parking problem and the closely related transit crisis seem to be getting about as much concerted study these days as juvenile delinquency, cancer, and other major target ills of the present-day population of the United States. City after city is compiling or studying master plans projecting their traffic problems as far in the future as a quarter of a century. George W. Keith, professional writer of Cincinnati, Ohio, has made a survey of enlightened opinion, turning on the basic inquiry as to whether subsidized parking could be an answer to the traffic crisis.

BUT YOU CAN'T SELL KILOWATTS ON GLAMOR

Electricity as metered is poor merchandise. What you have to sell is something for using it—appliances. To do that, you have to go away back where people are dreaming of homes, as they do in Los Angeles. James H. Collins, California writer of business articles, has been checking up on an interesting pattern developed by the home lighting committee of the Pacific Coast Electrical Association. What is average usage of electricity in the modern day and age in up-to-date new homes and with due regard for other residential living features? It would appear from this analysis that the model house has just about everything utility experts can think of for electric consumption.



Also . . . *Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.*

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Rate engineers of utility companies all over the country who use R & S analyses know how invaluable they are in securing favorable decisions in rate cases, because Public Service Commissions know and respect the thoroughness of R & S analyses.

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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

THEODORE KREPS
Economist, Stanford University.

"Well-advertised recessions rarely happen."

ROBERT E. LEE
Member, Federal Communications Commission.

"I believe I am one of the strongest free enterprise men on the commission."

WILLIAM RANDOLPH HEARST
Late publisher.

"The fundamental principle of democracy is that the people to govern wisely and well must know the truth."

ALLAN SHIVERS
Governor of Texas.

"One of the fundamental precepts of constitutional government is the citizen's responsibility for its preservation."

HERBERT HOOVER
Former President of the United States.

"The combustible materials are not hereabouts [today] to construct another conflagration like that of the decade of the thirties."

BENJAMIN F. FAIRLESS
Chairman of the board, United States Steel Corporation.

"The government alone can neither create prosperity nor overcome depression. Only the American people themselves can do that."

ELEANOR ROOSEVELT
Columnist.

"What frightens me is that we might get to the point where we accept the same type of control accepted by people in these (Iron Curtain) countries."

ROBERT L. MINCKLER
President, General Petroleum Corporation.

"More and more, business operations are judged by the importance of their social obligations and by the way in which those social obligations are met."

HENRY FORD II
President, Ford Motor Company.

"Let's not make a fetish of security, whether in our private, national, or international lives. It doesn't become a man; and certainly doesn't become a great nation."

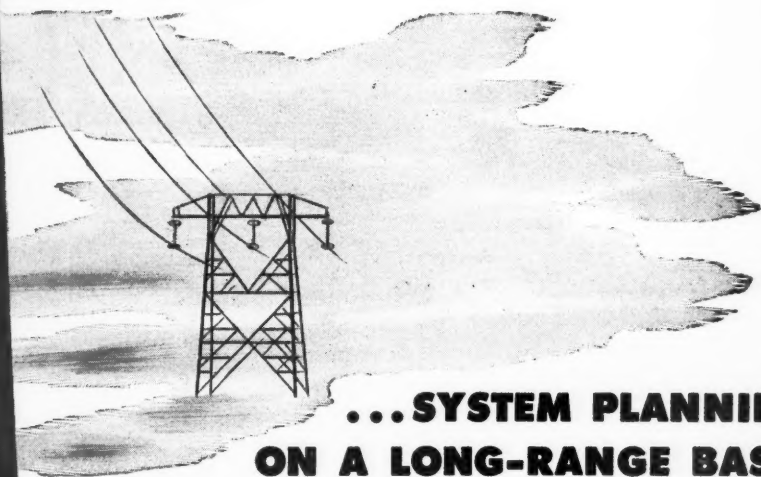
DUNLAP D. SMALLEY
President, Pacific Coast Electrical Association.

"... just as surely as a business will fail if it does not remain aggressive—we will lose the gains of last November if we do not keep practicing what we were preaching a year ago."

PERRY M. SHOEMAKER
President, Lackawanna Railroad.

"There exists in this country a tremendous backlog of need for new and additional facilities as well as for services, which, in my opinion, will strengthen and expand our economy. I believe therefore that there is every reason to view with encouragement the future prospects for business."

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gets things done
anywhere in the world*

REMARKABLE REMARKS—(Continued)

WALKER L. CISLER
*President, The Detroit Edison
Company.*

"We do not expect that commercially practical plants utilizing nuclear fuel will come into being in 1954 or 1955, but we should make definite, important advances in that time."

PALMER HOYT
*Editor and publisher,
The Denver Post.*

"A lot of important people are wasting a lot of breath and causing a lot of heartaches by insisting that we are going to have a depression. Talk of depression seems to me to be antisocial, foolish, and shortsighted."

P. NICHOLS
*Treasurer, Atlantic Coast
Line Railroad.*

"One of the most serious obstructions to efficient management of the railways is the restriction in the pricing of their product—transportation. The flexibility that is needed to meet changing conditions is entirely lacking."

EZRA TAFT BENSON
Secretary of Agriculture.

"I should like to see more industries shoulder their responsibilities by engaging in aggressive programs of research . . . before asking government to find an answer I should like to see industry develop the habit of seeking its own answer."

FRANK CHODOROV
Associate editor, Human Events.

"Nationalism is a necessary condition of freedom. This is particularly so in the case of the United States. In our tradition the concept of freedom rests on the metaphysical concept of natural rights; we hold that freedom is inherent in the individual by grace of God. In the traditions of all other countries the contrary view is held, that freedom consists of grants from the ruling power."

*Excerpt from
The Guaranty Survey, published by
Guaranty Trust Company of New
York.*

"A normal business decline is the concern of business, not of government. A weakening of demand is a sign of maladjustments, and the struggle to regain lost markets is the driving force by which the maladjustments are corrected. Only the buyers and sellers of goods and services can exert this force. 'Reflation' from without is no substitute for readjustment from within. Instead of correcting the maladjustments, it tends to perpetuate and aggravate them."

M. S. RUKEYSER
Columnist.

"It is sheer common sense that even in a country with a marked growth factor it is occasionally necessary to take one step backward before taking two steps forward. Even in dynamic America we don't always look for records each month. By eliminating the excrescences of inflation, and the ever-growing federal budgetary deficits, we lay a foundation for a continuous growth and prosperity based on technological improvements and an increment in population."

J. WILLIAM FULBRIGHT
U. S. Senator from Arkansas.

"The 'founding fathers' [were] free of that swinish blight so common in our time—the blight of anti-intellectualism. This blight, hitherto alien to our democracy, was endemic in fascist Italy and Germany as it is endemic today in Soviet Russia. [The founding fathers] had an immense contempt for the debater who descended to the low level of personalities. [They] detested the use of slogans and epithets, for their use is the last refuge of the mentally insecure and the intellectually bankrupt."

Gas Guardians!



SPRAGUE NO. 1A METER

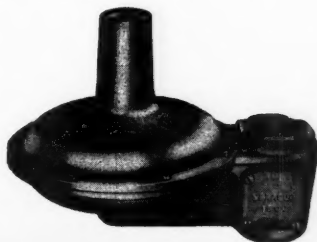
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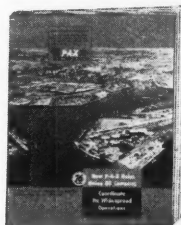
Communications men throughout the power industry know Automatic Electric as the makers of P-A-X Business Telephone Systems. With P-A-X, many power companies are discovering efficiency unimagined before—simply by separating their load of “inside” telephone calls from their volume of outside calls—by handling all “internal” communication over a separate system of P-A-X automatic telephones! And when P-A-X Sys-

tems are connected by microwave and carrier channels to link stations along the line, these same efficiencies are increased many times!

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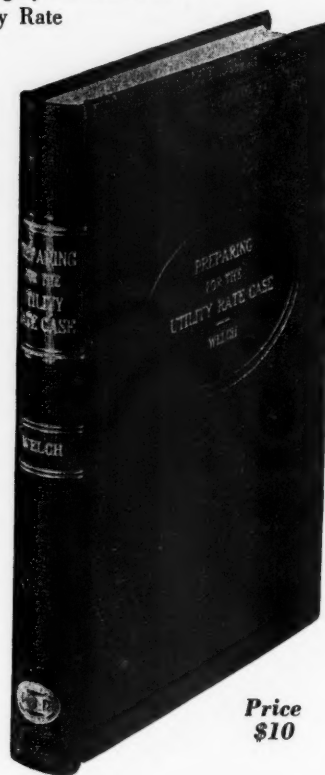
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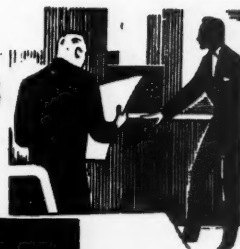
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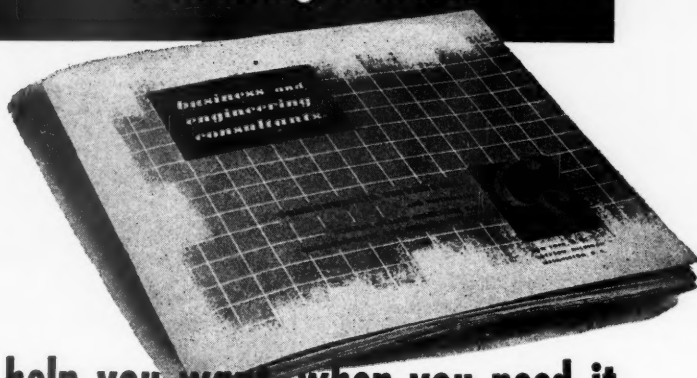
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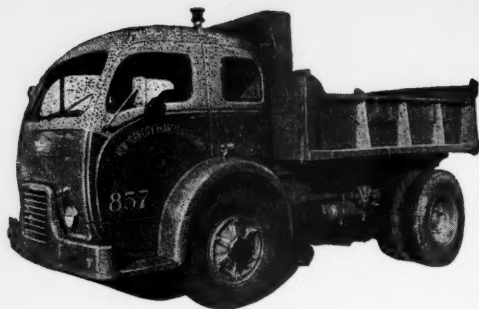
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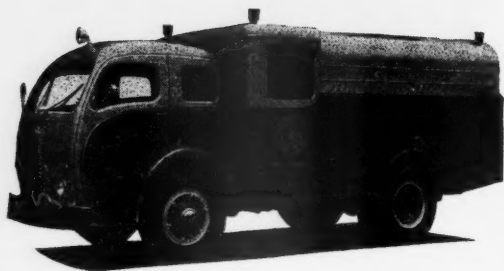
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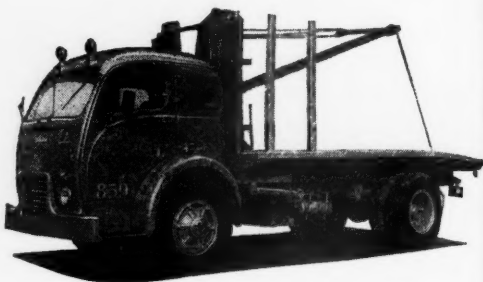
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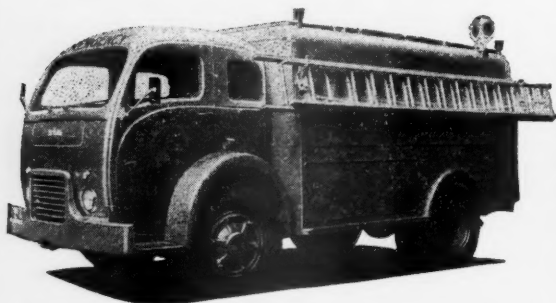
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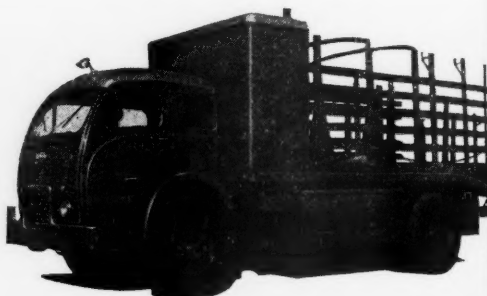
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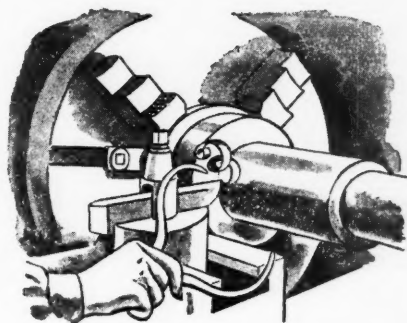
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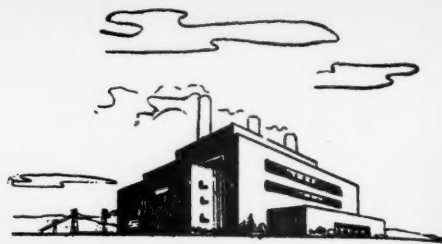
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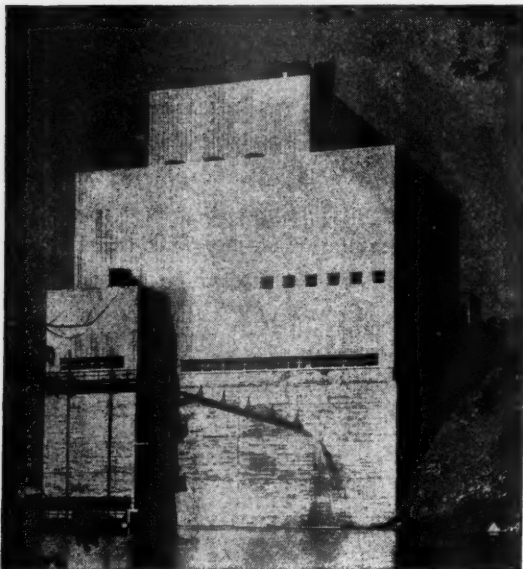
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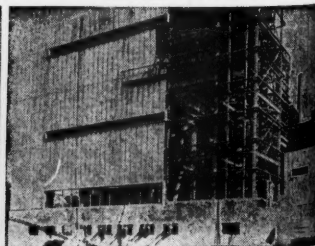
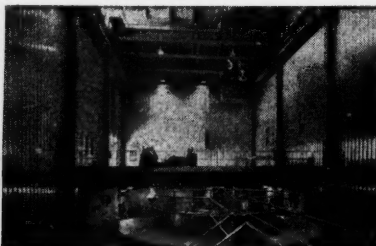
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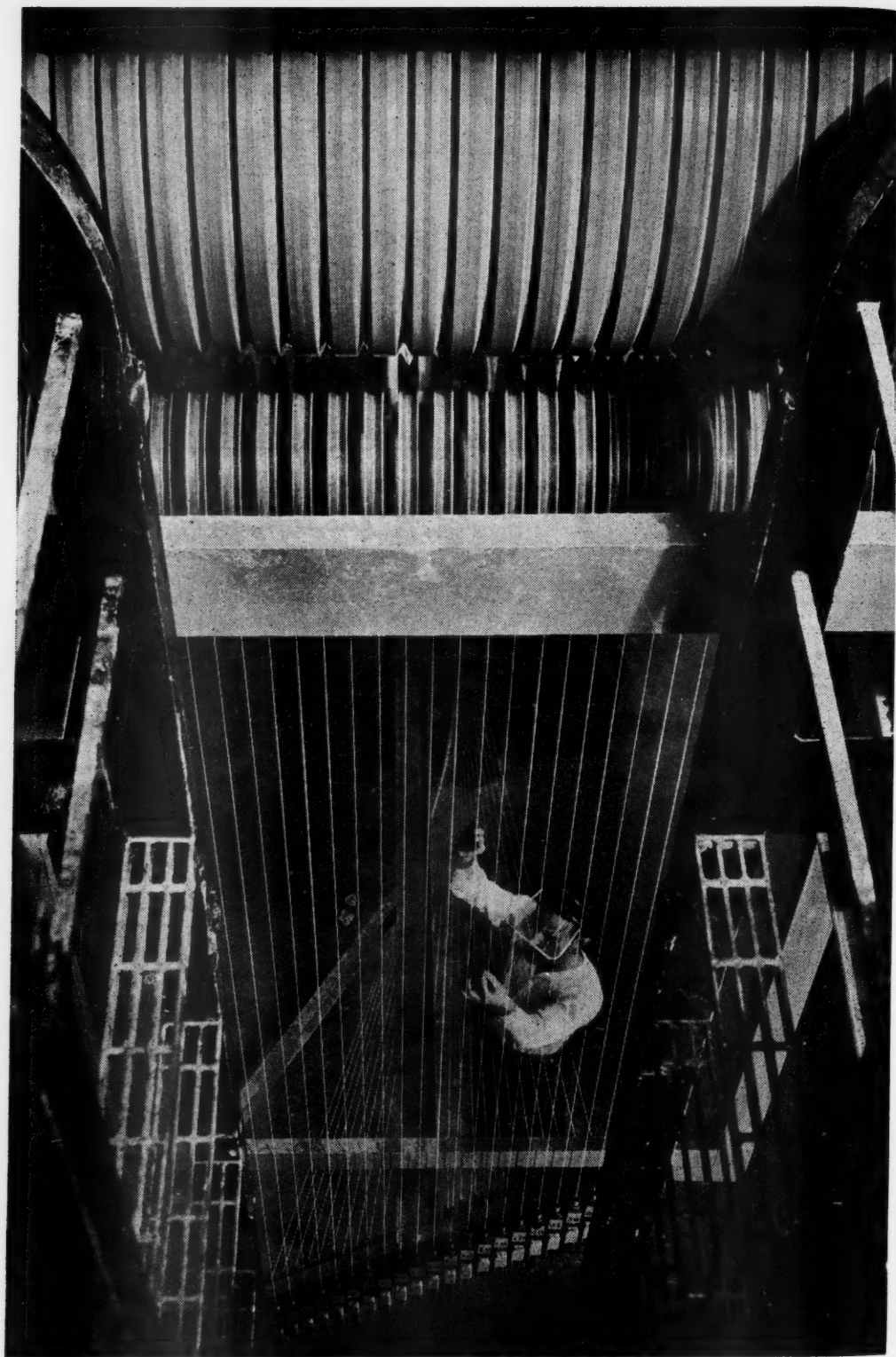
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Thursday—15 <i>Edison Electric Institute, Industrial Relations Committee, begins meeting, Cincinnati, Ohio.</i>	Friday—16 <i>Sixth National Personnel Conference of the Gas Industry ends, Chicago, Ill.</i>	Saturday—17 <i>Northwest Electric Light and Power Association, Engineering and Operation Sections, ends 3-day meeting, Seattle, Wash.</i>	Sunday—18 <i>American Public Power Association will hold annual meeting, Chicago, Ill. May 4-6. Advance notice.</i> 
Monday—19 <i>Illuminating Engineering Society begins South Pacific coast regional meeting, San Francisco, Cal.</i>	Tuesday—20 <i>American Gas Association begins distribution, motor vehicles, and corrosion conference, Montreal, Quebec, Canada.</i>	Wednesday—21 <i>Pacific Coast Gas Association, Technical Section, begins meeting, Santa Barbara, Cal.</i>	Thursday—22 <i>Indiana Gas Association begins annual meeting, French Lick, Ind.</i>
Friday—23 <i>American Water Works Association, Montana Section, begins annual meeting, Bozeman, Mont.</i>	Saturday—24 <i>Institute of Radio Engineers, sponsored by Cincinnati Section, begins spring technical conference, Cincinnati, Ohio.</i>	Sunday—25 <i>Wisconsin State Telephone Association will hold annual convention, Madison, Wis. May 5, 6. Advance notice.</i>	Monday—26 <i>Southern Gas Association begins annual convention, Houston, Tex.</i> 
Tuesday—27 <i>Illinois Telephone Association ends 2-day annual convention, Peoria, Ill.</i>	Wednesday—28 <i>Midwest Regional Gas Sales Conference ends, Chicago, Ill.</i>	Thursday—29 <i>National Association of Electric Companies begins annual meeting, Washington, D. C.</i>	Friday—30 <i>Illuminating Engineering Society ends 3-day Canadian regional meeting, Toronto, Ontario, Canada.</i>



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Industrial Symphony

This apparent harp playing is Electroforming, an operation for checking tension of telephone wire, at Point Breeze, Maryland.

Public Utilities

FORTNIGHTLY

VOL. 53, No. 8



APRIL 15, 1954

The Adjustment Clause, an Aid To Rate Regulation

The author has made a study of public utility expense fluctuation and the use of various types of escalator clauses to adjust utility rates in accordance with the more radical expense variations. The result is an interesting account of the acceptance by the regulatory authorities of adjustment clauses. There are reasons given as to why the adjustment clause, properly constructed, can operate as a positive aid in effective rate regulation.

By ORRIN S. VOGEL*

ONE of the primary objectives of utility regulation by legislative authority is to stabilize and control income. That objective cannot be satisfactorily attained unless some realistic method of relating variable operating costs to the price of the service is provided in the rate structure. One of the more practical solutions of this problem is to

use automatic adjustment clauses. Their use in rate making is the most equitable plan that has been developed for both the consumer and investor.

Regulated utilities operating under normal conditions need some means of adjusting fluctuating costs of operation, but in our complex economic system, during a period of inflation, the need for immediate relief becomes imperative.

In recent years various types of ad-

*Director of rates and research, Florida Power Corporation, St. Petersburg, Florida. For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

justment, billing, and escalator clauses, relating to fuel; power factor; load factor; commodity, wage, and tax costs have been used in electric rate schedules. Some of these have been used by the electric industry with regulatory approval for many years.

IN 1951 the writer made a study to obtain a picture of regulatory acceptance of the application of adjustment clauses, reviewing their use in the *National Rate Book* and by letters to staff leaders of many state regulatory commissions. This survey disclosed that adjustment clauses were being extensively used in electric rate schedules throughout the United States. Exceptions occurred in less than half a dozen states where obviously there was little need for them. In those areas the principal source of electricity was either subsidized government power, hydro power, or both.

The reason for writing directly to the commission staff leaders was that the inquiry pertained to technical matters and those men are the professional advisers to the commissioners. One of our college leaders addressing a graduating class in engineering said you cannot have a poor regulatory commission if you have competent staff leaders. Fortunately, there are and have been many able and dedicated men in this field of work.

The main question posed in my letters was:

What has been the experience and attitude of your commission regarding the use of inflation and other protective clauses in the rate structure?

HERE are several quotations taken from separate letters received from differ-

ent areas of the country which show the general character of the answers received in reply to that question:

"This state has recognized for many years the propriety of a fuel adjustment clause. All of our electric and gas companies have such a clause in their tariffs."

"They have gone very definitely on record to the effect that while they tolerate fuel clauses they are not in sympathy with commodity adjustment clauses."

"Variations in the cost of coal either upward or downward when on a cost basis have been made a part of rate tariffs filed with the commission for some years in the past."

"The commission has generally allowed fuel clauses where the utility desired them, except in connection with the residential rates other than space heating."

"This commission has declined to go along except for fuel adjustment clauses to be applied to industrial service and such clauses have been applied by some of the utilities as far back as 1913."

"I can see no difficulty in applying such variable clauses if the commission authorized the utilities to put them into effect."

"THE only inflation adjustment clauses in effect in this state at the present are fuel adjustment clauses. We feel that these fuel adjustment clauses when properly designed are very necessary and desirable."

"Answering your specific query, to date this commission has approved only one type of adjustment clause in the rate structure of the utilities and that is the fuel clause. A fuel clause is of the utmost importance in an area such as this where tremendously high fuel costs exist."

THE ADJUSTMENT CLAUSE, AN AID TO RATE REGULATION

"However, with the inflationary trends that now exist we may very shortly have to give month-to-month recognition to the serious impact on the earnings of the utility."

"We do have a number of examples of fuel price escalator clauses in both gas and electric tariffs."

"THIS commission has permitted the use of fuel clauses in the larger use rates and the fuel clauses as used are not necessarily tied directly to the utility cost of generation. The rates with fuel clauses are usually those that have been designed to meet competitive costs."

"The only recognition the commission has given to rising costs are the coal clauses allowed on electric power rates. Some of these were established as early as 1940. Most of the private utilities have these coal clauses on power rates. One electric utility has a coal clause on commercial electric rates for the use above 10,000 kilowatt-hours per month and one electric utility has a coal clause on electric contracts which have a commodity index."

"All but one of the major electric utilities have fuel adjustment clauses in certain of their rate schedules. One utility has the fuel adjustment feature in all rates. . . . Mainly, however, the adjustment clauses are confined to large com-

mercial and large industrial power rates."

"As you perhaps know the electric energy production in this area is comprised almost wholly of hydro units. However, to cover the excess cost in the use of steam for surplus energy requirements the companies under the jurisdiction of the commission have recently filed an emergency provision to cover this excess cost by a surcharge, applicable proportionately to the use of each utility using steam-produced power."

THESE quotations indicate that commission staff men who have had years of experience and training in the regulatory field recognize the propriety and equity of using adjustment clauses in utility rate schedules.

The fuel clause has been the one most widely accepted and commonly used in electric rate schedules. It is the medium through which automatic adjustments have been made to compensate for the effect of changes in fuel price levels on the cost of operations.

State regulatory authorities of necessity have given fuel, which is one of the larger and frequently changing segments of the cost of producing electric energy, more attention and study than any other cost item. It had to be done. The chart on page 469 shows the changes in the published price of Bunker "C" fuel oil at Port



"ONE of the primary objectives of utility regulation by legislative authority is to stabilize and control income. That objective cannot be satisfactorily attained unless some realistic method of relating variable operating costs to the price of the service is provided in the rate structure. One of the more practical solutions of this problem is to use automatic adjustment clauses."

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Tampa, Florida, since January 1, 1946. These changes would be reflected in the price levels over a wide area of the country. This is the type of oil generally used in steam-generating plants. It is evident from the wide range of the price levels and irregularity of the movement that some means of automatic compensation had to be provided in the rate structure.

It has become more and more unrealistic to attempt to control this major segment of the cost of producing electric power which periodically moves up and down over a wide price range, by tying it to a standard, fixed, or horizontal rate structure.

WHEN rate schedules are applied in the high-cost fuel areas without the aid of a fuel adjustment clause, the customer is required to pay either too much or too little for electric power. This is an unhealthy economic condition for both the consumer and the owner of the utility. Unfortunately, under these conditions the alternative to the use of adjustment clauses is continuous litigation which would be a difficult and costly procedure, largely at the expense of the consumer.

Practical experience has shown that it is far more equitable, particularly in these inflationary times, to provide a means for making immediate adjustments in the charge or monthly billing for service in proportion to the increase or decrease in variable operating costs. It has been forcefully demonstrated that unless commodity cost adjustments are provided, it is virtually impossible for the machinery of regulation to keep up with changed operating conditions. Although this article deals primarily with electric utility problems, other utilities have had a full quota

of rate-making difficulties in recent years.

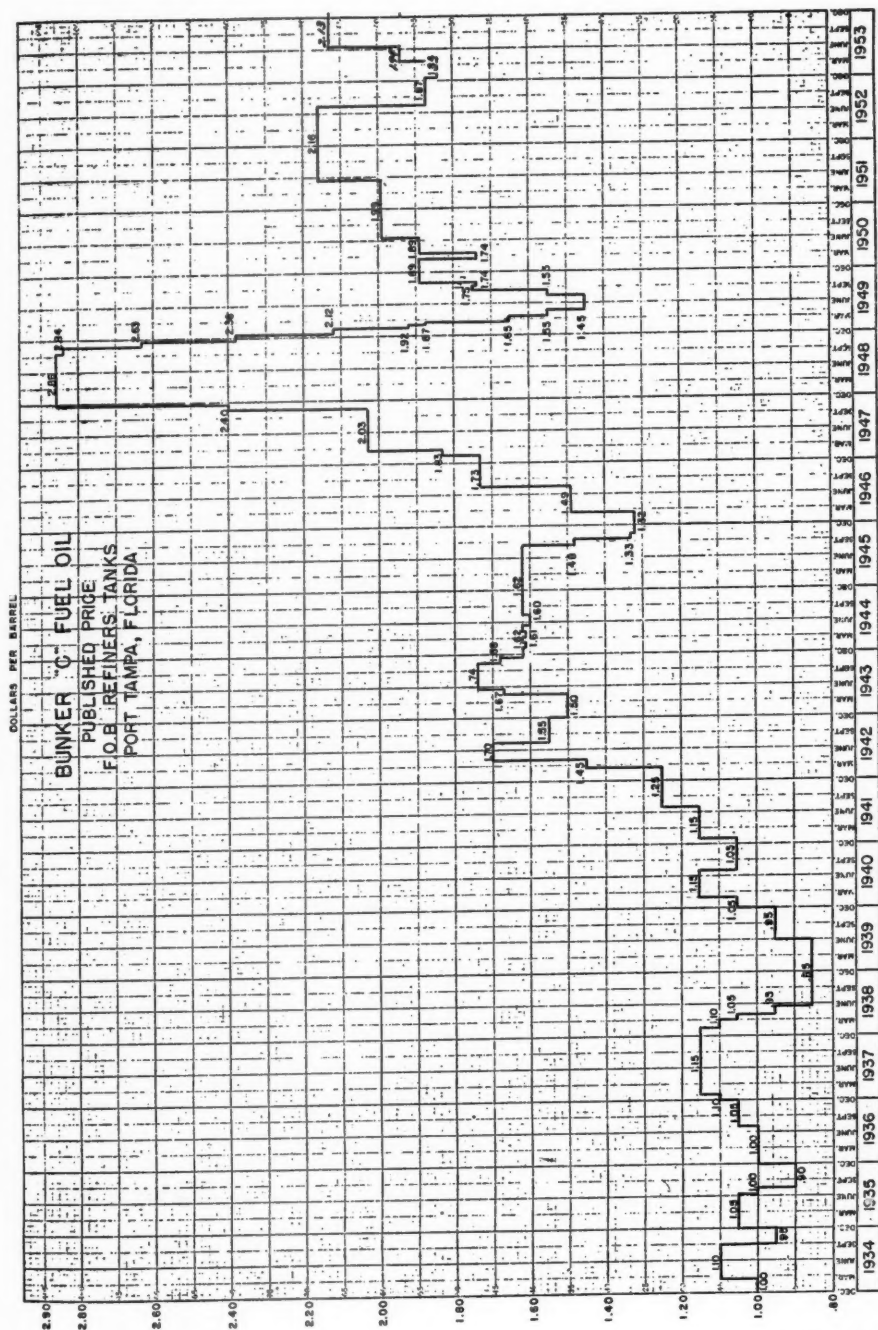
For proof of the above statement, we have only to look at the regulatory problems faced by the telephone industry since the war. Unfortunately, the telephone rate specialists have not been able to devise an appropriate cost adjustment escalator for use in their exchange and toll rate schedules. Under recent inflationary conditions which have spiraled telephone operating costs upward, their only alternative, for the past seven years, has been continuous rate litigation. If a better way can be found it will certainly be a blessing to the consumer, the investor, and the overburdened commission and utility rate men.

THOSE statements are not a reflection on utility regulation for it has met every challenge and the commissions have done a magnificent job over the years. Regulatory commissions are a worthy and adaptable part of our free enterprise system.

Do you realize how these remarkable regulatory institutions have been ingeniously adapting themselves to our way of life? They have been able to combine in an extraordinary and unique way the great principles of our republic — life, liberty, and the pursuit of happiness. For more than a half-century these institutions have sustained the life of investor-owned utilities by providing controls and protection. They have guarded the liberty of these great organizations by maintaining their freedom of operation and management and have promoted their welfare and happiness by contributing greatly in the building and stabilizing of our sound and free economy.

There are many essential needs for

THE ADJUSTMENT CLAUSE, AN AID TO RATE REGULATION



PUBLIC UTILITIES FORTNIGHTLY

automatic controls. In these times the utility cannot afford to make long-term contracts with manufacturers without the protection of adjustment clauses. It is very doubtful that any large manufacturer would make a contract with a private utility without the protection afforded by adjustment clauses. If the consumer did not have the protection of adjustment clauses and a sudden decrease in the cost of fuel occurred, and there have been many drastic decreases in recent years, one competitor manufacturing electric power could for a period of time have a tremendous advantage over another buying power under a contract. The flexibility obtained by the use of adjustment clauses is economically sound, equitable, and essential to both the consumer and investor.

IT is a lot easier to create misunderstanding than to remove it, and we are inclined to hedge a little against new ideas or methods. There is also the element of fear associated with things that we do not thoroughly understand. Undoubtedly, the reason for the wide acceptance of fuel adjustment clauses as compared with other types is the fact that its construction is readily understandable. The cost of fuel is known, the rate of generation per barrel of oil, per MCF of gas, or per ton of coal is usually available, and the over-all effect of an increase in price can be readily computed so that the adjustment increment can be easily obtained. Since those steps are clear-cut, the fuel clause has been generally accepted by the commission.

The above steps solve the problem if a utility uses only one type of fuel. Unfortunately, many companies use more

than one kind of fuel. This condition requires another calculation to translate fuels of varying heat content to a single unit of measurement such as the BTU.

ANOTHER step frequently taken, which has merit both from a consumer and regulatory standpoint, is to predicate the fuel escalator on the weighted average cost of the fuel burned, or, more simply stated, on the actual cost per barrel of the oil burned in the boilers each month. The advantage of this step is that it softens the impact of price changes.

For example, if the published quoted price is used as the control base, each price change would be reflected in a single full adjustment whereas by using the weighted average cost of fuel burned only a portion of the increase or decrease in price is immediately reflected. If the weighted average cost basis is used it will take two or three months for a change in price of fuel oil to be fully reflected in the bill. The reason is that the cost of the oil in the storage tanks, in the interim period, is a mixture of oil purchased at more than one price. Under this plan the actual cost of the oil burned in the boiler per month will lag the current cost of the oil being delivered until the costs equalize. This step is not essential from the utility standpoint, for over a period of time the lag on an increase in price would offset the lag on a decrease in price.

THE wide acceptance of the fuel clause did not occur overnight. We should not expect to receive blanket approval of the use of the commodity cost adjustment in rate schedules. It is a relatively new plan and, like any other new idea, this

THE ADJUSTMENT CLAUSE, AN AID TO RATE REGULATION

adjunct in rate making, regardless of its merits, must be sold to the regulatory authorities and consumers.

IN the years prior to World War II, electric rates were considerably higher than they are today. During that period there was a little cushion in the rates. That condition, along with improved operations and increased consumption of power, made it possible for revenues to keep pace with increased operating costs. But operations have been very different since the war. Improvements in operating efficiency and increased usage have not been sufficient to offset the increases in the cost of operations.

Labor costs in some utilities make up as much as 75 per cent of the electric utility's operating and maintenance costs other than fuel and purchased power.

These labor and material cost changes which should be adjusted are those incurred in the conduct of the business and in maintaining the property and facilities now being used to provide service to the consumers. They must not be confused with construction costs.

The utilities cannot control labor rates or material prices. Wage scales are established largely by negotiation with the labor organizations. In recent years there have been many substantial wage increases.

REGULATED utilities must carry on their business at fixed rates established by the regulatory authorities. Those rates are usually based on the level of operating costs prevailing at the date of the rate order.

They should provide the prescribed rate of return. If that fair return is to be earned under these inflationary conditions, the company must either conduct frequent rate proceedings or obtain authority to use a commodity adjustment clause in its rate schedules.

Although this is a specific case it will indicate the magnitude of the variable costs that need control. In 1953 oil, which is the principal fuel used in the boilers of our company, cost about \$7,000,000. The wage bill for operations and maintenance excluding wages for construction was approximately \$4,500,000. When we consider these facts it is evident that a small percentage increase or decrease in either of those cost categories would drastically affect the company's income and occasion another rate proceeding.

To modify this unrealistic condition several large electric utility companies have been using commodity adjustment clauses in their retail rate schedules in recent years.

THERE are a number of essential factors and conditions that must be



Q "ANY practical plan that will help stabilize income and at the same time provide an equitable way of balancing investor and consumer interests is surely getting close to the heart of good regulation. The use of adjustment clauses in electric rate schedules, when properly designed and applied under regulatory commission authority, greatly facilitates the accomplishment of that objective."

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considered in the development of an appropriate commodity escalator:

The index upon which the adjustment is to be predicated should be a readily and periodically available public record. It is desirable to have the index used compiled by some independent organization, preferably one weighting government and independent data.

The index should be geared as closely as possible to the movement of the same costs as those involved in the utility's operation, and to keep billing cost to a minimum it should not require too frequent adjustment.

One of the main objectives in the selection of the control escalator is to find an index with a rate of change which, when measured over a period of years, will have approximately the same slope as the graph of the index representing the costs to be controlled. If the costs involved are predominantly labor, the curve of the control index should track closely the curve of the index of the company's labor costs.

THERE are several well-established indexes that have been used as escalators for commodity adjustment clauses. One of the better indicators for this plan is the Composite Construction Index, a monthly compilation published by the U. S. Department of Commerce.

The Composite Construction Index is developed by combining and weighting several well-known government and privately compiled indexes. This index reflects the average movement of the level of heavy construction costs, including those relating to public utilities. The com-

posite construction costs used in the development of this index contain labor and material classifications that are largely the same as those found in utility operating costs.

This index is the resultant of the movement of a series of costs, any one of which taken at a given time would not fit the composite curve. If the graph of the company costs tracks the curve of the selected index, when plotted over a period of years, the rate of change in the level of the cost factors upon which the indexes are predicated, has been approximately the same.

In that case either index could be used as an appropriate escalator base.

IN conclusion, it might be well to consider a few of the myths and misunderstandings about adjustment clauses.

One of the myths is that adjustment clauses usurp regulatory authority. The following statements by commission staff leaders, taken from different areas, are good answers to that unrealistic conclusion:

"I do not see that an inflation adjustment clause could circumvent regulatory powers for very long. I suppose that every regulatory agency examines the operating reports of the utilities under its jurisdiction at least annually. Any moneys derived from adjustment provisions such as your tariff contains will appear as revenue and also in net operating revenue. If the net is more than it ought to be the appropriate rate adjustments are in order."

"Since this commission has the authority to make an investigation and conduct a hearing on its own motion, the application of a fuel adjustment clause does not

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circumvent any part of the regulatory powers of this commission."

"The inclusion of fuel and commodity clauses in public utility rate structures, generally would not circumvent government regulation, but I think that it would depend upon the applicable clause of the particular state."

"The argument that adjustment clauses in rate schedules tend to nullify to some extent regulatory powers has never particularly impressed me. The regulatory agency is presumed to have continued jurisdiction and in view of present loss and more or less standardized procedures for rate making, to say that rate adjustment clauses circumvent effective regulation is merely to admit, in my opinion, that the agency is not alert to its duties and responsibilities if excessive earnings develop concurrently with operation of automatic adjustments in rate schedules."

ANOTHER false idea regarding the use of adjustment clauses is that they may permit duplicate charges. That is not true. Adjustment clauses are designed to increase or decrease revenues by an amount equal to the changes in the level

of specific costs above the level relating to the base rates.

There is some misunderstanding regarding the fact that at a given time there may be a difference between the amount of the change in costs to be controlled and the amount of revenue collected by the application of the adjustment clause. Of course, there can be temporary differences between the movement of the control index and the level of the company costs involved, but over a period of time those differences tend to equalize. However, it is a much better plan to automatically adjust these large variable costs, even if there is a difference between the increase in cost and the recovery, rather than to be forced into a rate litigation.

ANY practical plan that will help stabilize income and at the same time provide an equitable way of balancing investor and consumer interests is surely getting close to the heart of good regulation.

The use of adjustment clauses in electric rate schedules, when properly designed and applied under regulatory commission authority, greatly facilitates the accomplishment of that objective.

"THE cuckoo is a European bird which never builds its own nest, but steals those built by other birds. Privately owned power companies have spent many hundreds of billion dollars in research and invention since Edison constructed the first incandescent lamp. These costs have been met by the companies themselves. If the federal power system has ever invented any electrical device of any sort, even a nut or a bolt, the writer has never heard of it. It has consistently plucked the brains of bigger, better, and infinitely more honest public servants than have ever existed in government-controlled power projects."

—JOHN T. WOOD,
Former Congressman from Idaho.



How the AT&T Finances Billion-dollar Programs

Since the end of World War II, the American Telephone and Telegraph Company has been engaged in a series of record-breaking security issues, forming part of a \$10 billion program for financing the unprecedented demand by the people of the United States for telephone service. The problem of distributing these tremendous issues has challenged all the "know-how" and resourcefulness of the Bell system experts.

By J. LOUIS DONNELLY*

AERICAN TELEPHONE AND TELEGRAPH COMPANY has sold to its share owners and to investors more than \$2.6 billion of convertible debentures during the postwar period.

Proceeds have been used to finance in part the \$10 billion spent by AT&T and Bell system companies in this period to meet an unprecedented demand for communications services.

Financing of this type has been most popular with stockholders and other in-

vestors, with the result that each offering has been readily sold.

The latest offering of \$602,000,000 of 12-year 3½ per cent debentures was made in twenty-four business days which would mean the sale, on the average, of more than \$25,000,000 a day, or well in excess of \$3,000,000 an hour.

EVERY modern facility was used by the company in putting through this transaction. The entire operation was benefited by experience gained in the five previous postwar financing moves.

Considerable use of Bell system tele-

*Editorial staff of New York Journal of Commerce. For additional personal note, see "Pages with the Editors."

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phones was made. It was found to be far more satisfactory and cheaper to communicate with the share owner in this manner in cases where questions were raised. Not only was the individual pleased when he received a call from someone representing the management of American Telephone and Telegraph Company, but the problem involved was quickly settled to the satisfaction of all concerned.

Latest-type office equipment made by such companies as International Business Machines Corporation, Pitney Bowes, and others was used. Various mechanical devices developed by American Telephone personnel were also used to simplify the vast operation.

THE planning and organization work involved in an operation of this kind is tremendous. In addition, the timing of the offering is of greatest importance. Those responsible for such decisions have had an excellent record over the years, and the latest financing surpassed earlier ones in numerous respects.

One of the strong points of all of these financing moves has been the excellent appeal of American Telephone and Telegraph Company shares to the investing public. Most important has been the long record of continuous payments of \$2.25 a share quarterly in dividends. Investors have come to regard this as a fixture, thus adding to the responsibility of management.

Ability of directors to resist a popular trend of voting stock splits has been most helpful.

Most arguments favoring capital changes of this type fail to carry weight when applied to American Telephone and

Telegraph shares. These are: that the only way to increase the number of share owners is to recapitalize through stock dividends or the splitting of shares; that share owners favor a lower selling price; and that the market gives a better appraisal of a security when the price is at the more "popular" range.

None of these, of course, applies to American Telephone. More important, financing is actually aided by the high quotation for American Telephone stock, due to the increased quoted value of the rights when traded on the New York Stock Exchange and other security markets.

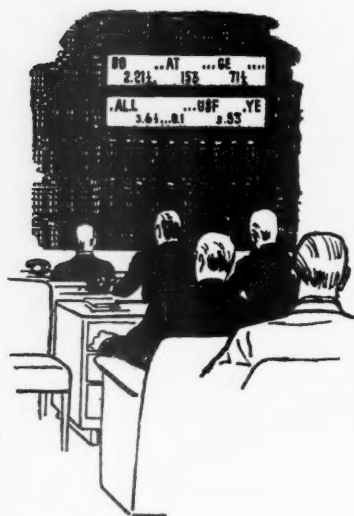
In the 1953 financing, the rights had a price range of 2-5/8 high and of 2-9/32 low. This moderately exceeded the 1952 range of 2-13/32 high and 2-1/16 low.

A tabulation of the last six offerings of convertible debentures by the company follows:

Year	Amount Offered (Millions)	Value of Rights		
		High	Low	Mean
1946	\$343.0	2-11/16	1-1/2	2.09
1947	357.5	2- 1/16	2-9/32	1.48
1949	394.4	1- 7/16	1-1/32	1.23
1951	415.4	2- 7/16	1-5/8	2.03
1952	498.6	2-13/32	2-1/16	2.23
1953	602.5	2- 5/8	2-9/32	2.45

THE 1946 offering had been the first of convertible debentures since 1941. Prior to that, such financing was undertaken in 1929 and 1918. There were direct capital stock offerings in 1930, 1928, 1926, 1924, 1922, 1921, and 1917.

Management has favored the convertible security over the direct stock offering throughout the postwar period. Stockholders are entitled to receive one "right" for each share held on the "record date" for an issue and the "rights" are evidenced by subscription warrants.



The Popular "Convertible"

"AMERICAN TELEPHONE AND TELEGRAPH COMPANY has sold to its share owners and to investors more than \$2.6 billion of convertible debentures during the postwar period. Proceeds have been used to finance in part the \$10 billion spent by AT&T and Bell system companies in this period to meet an unprecedented demand for communications services. Financing of this type has been most popular with stockholders and other investors, with the result that each offering has been readily sold."

Various innovations have resulted from the moves to raise new capital.

In 1946 the first successful attempt was made to eliminate confusion involving the fractional warrant. In the 1941 and previous issues of subscriptions rights, stockholders had received a full share warrant, which represented even multiples of \$100 of debentures to which the stockholder was entitled to subscribe; also a fractional warrant which represented the additional right for less than six shares held; and an order blank which could be used to instruct the company as to use of the warrants.

The full and fractional warrants were combined into a single warrant in 1947 along with the customary order form.

This proved most successful and encouraged subsequent moves of simplification. In view of the substantial increase in the number of American Telephone share owners, any move to simplify such

a huge financing operation would be most important.

THE 1953 warrants were different in that all necessary instructions and forms for denoting action to be taken by the owner, were combined on one side of the paper.

An innovation was a statement on the warrant that the company would hold debentures for them after subscription, for conversion after February 9, 1954. Advantage of this move was taken by 112,000 or more than one-fourth of the subscribers. The company was to advise the individual, as of the conversion date, of the additional amount of payment due. This proved a convenience not only for the subscriber but also the company as it greatly simplified the handling of the debentures.

Temporary debentures with two years of coupons were prepared. It has been

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indicated by past experience that only a small percentage of the temporary debentures remains to be exchanged for the permanent debentures having coupons to the maturity. This has been done since 1945.

Cost of the entire operation approximated \$3,000,000, including labor.

An entire building with more than 100,000 square feet of floor space was used. The site had been purchased to house certain regular operations of the treasury department of American Telephone and was in process of complete renovation when the new financing step was undertaken. The work had advanced sufficiently to permit the handling of the operation there.

Approximately 1,100 temporary employees were needed. These were obtained mainly through the contacting of 75,000 Bell system employees and from a resultant 5,000 applicants. Others came from college employment bureaus.

The supervisory force was expanded with about eighty employees borrowed from other American Telephone departments and from other Bell companies. Some of the latter brought their wives along, and in a few instances they joined the working forces along with their husbands.

WARRANTS were mailed on November 5th to 1,250,000 share owners of record October 31st. At the time there were 42,178,000 shares of stock outstanding.

There were about 750 employees on the job during the week ended November 7th. This working force was built up to a peak of 1,100 in the week ended December 12th, when the warrants expired.

Numerous transactions, involving the

exercising or sale of rights, were made directly by holders at public offices in New York, Boston, Chicago, and San Francisco where American Telephone maintains permanent stock transfer facilities. Many cash payments were involved, with one man subscribing for \$7,000 of new debentures and paying for them with cash at the 195 Broadway, New York city office.

Some veteran stockholders used the occasion to make a personal visit to the company's office.

An additional idea as to the size of the undertaking was that the mailing of warrants, together with a 40-page prospectus, involved a total weight of about 100 tons. There were 850,625 pieces of incoming mail received. In addition there were 65,000 contacts at the four public offices.

A total of 28,000 communication replies were made. These involved 11,500 outgoing telephone calls and 5,000 dictated letters. The remainder were printed forms.

The entire operation was most efficient and reflected the experience of five previous large debenture offerings of this type, each one being more streamlined in procedure than the previous one.

ONE side light of interest to the American Telephone management is the faith and trust which some of the share owners place in them. This was indicated by the many blank checks and large amounts of cash mailed in to accompany subscriptions.

Although there were by far more stockholders involved than ever before, a larger percentage of holders subscribed for the new issue. Holders of only one

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per cent of the subscription rights failed to take advantage of the offer and let their rights expire. These rights were worth more than \$1,000,000.

In 1952 holders of 1.1 per cent of the rights allowed them to expire and in 1951 the percentage was 1.81.

The unsubscribed debentures in 1953 aggregated \$6,140,900 as compared with \$5,571,600 in 1952 and \$7,515,700 in 1951.

The favorable showing of the latest offering reflected steps taken by American Telephone to obtain the best possible results. Well in advance of the expiration date, the company sent out 40,000 special letters to share owners who allowed their 1952 rights to lapse.

Each warrant received by a share owner was divided into various sections to simplify the operation. The share owner had the option of taking one of three steps: (1) to subscribe for debentures and to buy or sell rights as necessary to provide the exact number needed for his subscription; (2) to sell all the "rights" represented by the warrant through the Bankers Trust Company which acted as rights agent; or (3) to sell through brokers.

IT required seven rights to subscribe for \$100 of debentures and as there are very few owners with holdings which are a multiple of seven, numerous additions or sales of the odd amounts were involve. Most individuals in subscribing would buy to round out their transaction, although many sales were made.

Where rights were sold, the Bankers Trust Company, as rights agent, would mail out the checks for proceeds. A

bearer check would be used for amounts up to \$75 and registered checks for larger amounts. These would be mailed out to the share owner, together with a part of the warrant containing the name and address and they were placed in a window envelope.

About \$50,000,000 in postdated checks were received with subscriptions.

Where the owner was a distant foreign resident, the warrants were retained by the company and if no special instructions were received, they were sold for the account of such individuals.

A number of progress charts were available to the supervisory staff throughout the underwriting period. These showed day-to-day comparisons against results in the 1952 operation.

The use made of the telephone to clarify questions raised by shareholders located in various sections of the country was of special interest.

VARIOUS studies have been made showing advantages in using the telephone as compared with mail.

The telephone was also used where unsigned checks were received for subscriptions. Here the company would contact the individual and his bank and arrange to have the signature typed in.

The final chapter in the financing was January 12th when the company sold \$6,140,900 of convertible debentures through brokerage firms on the New York Stock Exchange. This represented the unsubscribed portion of the offering. Proceeds from this transaction, in excess of what would have been realized by sale through subscription, offset to a large extent the cost of the entire undertaking.

New Light on an Old Subject

Has the federal government actually discovered a way to make and serve electricity to the public cheaper or more efficiently than a privately owned utility? This is an old subject but it is approached in a new and objective way.

By DAVID E. GOGGIN*

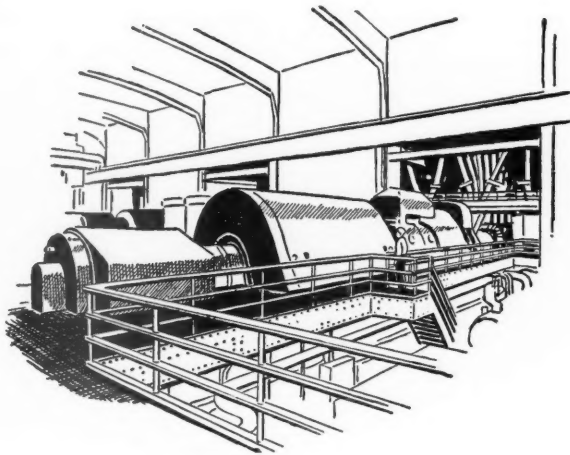
SINCE an early ancestor first shouldered a carefully selected club, man has had to exercise his intelligence and use his experience in choosing the materials and actions suited to and needed for his existence. He has been aided in all ages and circumstances by his ability to "compare" and this faculty enabled him to decide between two or more materials and courses of action. He was ever hopeful of choosing the best on the basis of comparison.

The earliest man had a rather easy time of it because his wants were simple and his choices, and therefore his opportuni-

ties for extensive comparison were quite limited. As civilization became more complex, man's wants and his alternative choices became more numerous and more difficult of comparative evaluation because of a growing number of influencing factors.

EVEN today, the resolution of personal, national, and international issues is a matter of making comparisons and evaluations of probable results and exercising a choice. The decisions are seldom easy because of numerous alternatives which present themselves, each with known and unknown and favorable and unfavorable characteristics. Comparisons

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and choices, therefore, require much deliberate thought and careful analysis.

And so it is with the present-day question of publicly owned *versus* privately owned electric power. No doubt the first comparisons of the two modes of operation were made shortly after the first publicly owned system came on the scene.

IN recent years, with the annual publication by the Federal Power Commission of electric utility operating and financial statistics separated between privately owned and publicly owned systems in the United States, it was inevitable that comparisons of the results of the two forms of ownership be made more frequently and with greater fervor and interest.

Such comparisons have been made, in greater or lesser detail, principally by the advocates and adherents of public power. The FPC figures have been used in efforts to establish in the public mind an impression of superiority of publicly owned systems in rendering electric service to the American people.

But the available published statistics will not permit a fair comparison. Unfortunately, the FPC figures do not include all of the publicly owned electric utilities. The 1951 summary for such systems, for example, discloses that it includes 266 publicly owned electric utilities with 70 per cent of the plant investment and kilowatt-hour sales, and 60 per cent of the revenues and customers of all nonfederal public systems. The FPC summary for privately owned systems indicates that 98 per cent of that segment of the industry is included in its figures. Therefore, it appears that virtually the whole of the private electric utility indus-

try is being compared with about two-thirds of its publicly owned counterpart.

THE 1948 *FPC Directory of Electric and Gas Utilities in the United States* (the latest published) shows that there were 2,067 municipally owned and an undisclosed number of state-owned electric utility systems in operation at that time. Thus it appears that the FPC statistical summaries omit approximately 1,800 publicly owned systems.

The systems omitted were small individually, each with \$250,000 or less of annual revenue. But in the aggregate they represent about one-third of the publicly owned electric utility industry. More important, since such systems had 30 per cent of the kilowatt-hour sales and 40 per cent of the revenues of all publicly owned systems, the inescapable conclusion to be drawn from the relationship of those percentages is that they have higher rates and *ergo* higher costs than the 266 systems included in the FPC summaries.

For instance, only eight of the larger Wisconsin municipal electric utilities are included in the FPC summaries and about 75 smaller Wisconsin systems with known higher rates and costs are omitted.

Obviously, this is an unfair handicap to the privately owned utilities and is almost as heavy as the tax handicap in a comparison of the results of the two systems of ownership. The 266 publicly owned utilities summarized in the FPC figures are concerned for the most part with serving only the densely settled confines of one community; most of the systems are in communities of over 5,000 population and reach and serve comparatively few rural and small-town customers. The exclusion of about 1,800

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smaller publicly owned utilities manifestly shows the 266 larger systems in a more favorable light as to rates and costs.

THE privately owned utility summaries, on the other hand, include the costs and necessarily higher rates of serving customers in thousands upon thousands of small cities, villages, and cross-roads hamlets as well as over two million farms and many, many thousands of other customers in rural areas.

Nevertheless, it can be demonstrated that the privately owned electric utilities are doing an efficient and economical job of serving the American public, even in comparison with the most efficient of the publicly owned systems.

Take first the subject of plant investments per customer served. A casual examination of the comparative per customer investments in property and plant by the two modes of electric utility operation will show a slight difference in favor of public power. In 1951 the 266 publicly owned systems had plant investments of \$539 per customer against a private power figure of \$568 per customer. But there are very logical and legitimate reasons for this situation. People in the public power camp are prone to forget these facts.

First. The publicly owned utilities purchase almost half of their total energy requirements from outside sources and

hence do not need to make a large investment in generating equipment to meet this load. The private utilities generate nearly all of their energy requirements in their own plants and accordingly have proportionately heavier investments in generating equipment.

Second. Almost 15 per cent of the privately owned systems' investment is in transmission and substation facilities. Since the publicly owned utilities are largely confined to limits of the communities which they serve, they have no need for extensive transmission networks.

THIRD. Because publicly owned utilities are generally confined to the corporate limits of their communities, they do not reach out and serve the sparsely settled rural and country village areas. Electric distribution line facilities in these areas are very expensive on a per customer basis. The private utilities serve millions of customers in such thinly settled territories and the investment per customer in distribution facilities alone, without any proportionate share of generating or transmission plant, often runs well over \$500 per customer. The average distribution system investment for all federally financed REA co-operatives was \$511 per customer at the end of 1951. But the public power figures do not include the REA systems.



Q "THE bulk of publicly owned electric systems are owned by municipalities, hence the operation of a utility system is often closely tied to other municipal functions. Unless accounting proprieties are strictly observed, there are many opportunities to have other municipal, tax-supported functions carry certain expenses which are rightfully assignable to the electric utility."

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Now turn to the matter of the average annual kilowatt-hours used and the average annual bill for such service paid by the residential customers of the two forms of ownership. During 1951, the average residential customer of the privately owned utilities in the United States used 1,910 kilowatt-hours for which he paid \$55.23, or 2.89 cents per kilowatt-hour.

During the same year, the average residential customer of the 266 publicly owned systems used 2,745 kilowatt-hours and got a bill for \$52.21, or 1.90 cents per kilowatt-hour. Unquestionably, these figures show that the customers of the publicly owned systems got more energy for less money.

But in the same FPC publications from which such figures were taken, it is possible to examine into the background of these surface comparisons. The FPC statistical experts apparently realize that serious distortion to the publicly owned systems' sales and revenue statistics is caused by special situations existing in the Tennessee valley area and in the Pacific Northwest. Here great quantities of federally financed and generated power are preferentially sold to publicly owned systems at extraordinarily low costs, which are virtually free of taxes and include very little interest on Uncle Sam's huge investment in power plants. Residential customers of publicly owned electric systems in the Tennessee valley area, and especially in the Pacific Northwest

area, individually use large quantities of this low-cost, federalized power.

Because of this situation, the FPC divides the kilowatt-hour sales and revenues of residential customers of publicly owned electric utilities among the Tennessee valley area, the Pacific Northwest area, and (all) other areas. It seems significant that the residential customers of publicly owned systems in other areas used 1,895 kilowatt-hours in 1951 compared with 1,910 kilowatt-hours used by customers of the privately owned utilities. For those 1,895 kilowatt-hours, the residential customers of public systems paid \$49.27, or an average rate of 2.60 cents per kilowatt-hour, compared with the average private utility bill of \$55.23 at an average rate of 2.89 cents.

THESE comparisons are still unfair to the privately owned systems because the publicly owned systems' figures do not include the 1,800 small systems, and, more important, because the comparisons do not recognize the tax differential between the two types of ownership.

The same FPC publications heretofore mentioned show that in 1951 the privately owned electric utilities paid 21.8 per cent of their gross revenue in taxes of all descriptions, while their publicly owned counterparts paid only 2.5 per cent of gross revenues in taxes.

Taking all taxes out of the average bills under both systems of operation yields the informative results below.

Residential Service—1951

Average Kilowatt-hours Per Customer ..	1,910
Average Bill Per Customer	\$43.19
Average Cost Per Kilowatt-hour	2.26¢

<i>Privately Owned Utilities</i>	<i>Publicly Owned Utilities in "Other Areas"</i>
1,910	1,895
\$43.19	\$48.04
2.26¢	2.54¢



Proper Labeling for Taxes and Interest

"PUBLIC power advocates frequently seem to have some trouble in distinguishing between taxes, and return or 'interest' on the investment the municipality has in the electric utility. Unless a payment, accrual, donation, or contribution of funds is distinctly labeled as taxes, and deducted from gross electric revenues along with other operating expenses and depreciation to determine net utility income, it is not taxes or a payment in lieu of taxes. It is a safe bet that any regulatory body would so find."

One could, in the same good conscience, perform the same sort of operation on the other large class of service, commercial and industrial sales, with much the same result. Therefore, using a respected source of statistical material, it is possible to demonstrate that the privately owned utility industry does not occupy an indefensible rate position.

THE same can be said about other departments of utility operation. Privately owned electric systems in 1951 had total production operating costs of 4.87 mills per kilowatt-hour sold compared with 4.92 mills per kilowatt-hour for publicly owned systems. This comparison becomes more impressive when one considers that the publicly owned sys-

tems purchased more than one-third of their total requirements from federal power agencies at ridiculously low prices. Where publicly owned systems do generate their own requirements, we can calculate from the 1951 FPC statistics that their steam-generated energy is 38 per cent more costly in production expenses per kilowatt-hour than privately generated steam power and their hydraulic energy is 4 per cent more costly.

During 1951, privately owned electric systems spent .26 mills per kilowatt-hour sold for transmission operating expenses while the publicly owned systems expended .13 mills per kilowatt-hour sold for this purpose. Since the publicly owned systems generally are concerned with serving only within one community,

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they have no need for extensive transmission networks. When and where publicly owned electric utilities purchase energy at wholesale for distribution within their corporate limits, the selling agency usually delivers the power at or within the city limits. And if the publicly owned system generates its own energy, the plant is usually pretty close to the center of the load.

The privately owned systems, on the other hand, need extensive transmission networks to interconnect their plants and their systems and to bring energy to every corner of their wide-flung territories, which include the "wide spots in the road" as well as the metropolitan cities. Under the circumstances, the privately owned transmission operating expense of .26 mills per kilowatt-hour sold does not seem unreasonable for this vital service.

DISTRIBUTION operating expenses are another case in point where the costs of serving wide-flung territories are heavier than in closely settled urban areas. Privately owned electric systems reach and serve millions of customers on farms, in other rural areas, and in thousands upon thousands of small villages and unincorporated hamlets. The distribution costs in these leaner areas are heavy because of the travel distance from operating headquarters and the low density of customers per mile of line.

Contrast such territories with the close-knit publicly owned systems, usually within the confines of one community, where customer density is high.

Despite territorial differences, the privately owned utilities spent only \$12.46 per customer for distribution operating expenses in 1951 against an average ex-

penditure of \$12.14 per customer for this purpose by 266 publicly owned systems. One wonders what the addition of 1,800 smaller publicly owned systems would have done to the latter figure!

The so-called managerial expense groups have been the subject of some critical *odious* comparisons in the past. These groups include customers' accounting and collecting, sales promotion, and administrative and general expenses. During 1951, the privately owned utilities spent \$16.11 per customer for such purposes, while the publicly owned systems spent an average of \$11.76 per customer.

THE bulk of publicly owned electric systems are owned by municipalities, hence the operation of a utility system is often closely tied to other municipal functions. Unless accounting proprieties are strictly observed, there are many opportunities to have other municipal, tax-supported functions carry certain expenses which are rightfully assignable to the electric utility. Such opportunities for subsidy are most often found in the so-called managerial expenses but are by no means limited to those groups.

For example, there are instances where municipal electric systems enjoy free or underpriced office, garage, and service quarters in the city hall or other municipal buildings; cashier service; legal, engineering, managerial, and personnel services; emergency transportation and man-power assistance from the street and other municipal departments; and pension systems which are tied in with the general city retirement plan. In addition, municipal systems have little trouble with bad accounts, since in many cases unpaid electric service bills are added to general

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property tax bills, regardless of who incurred them.

These "special" and underpriced services may be relatively insignificant individually, but in the aggregate they could be a substantial factor in the over-all managerial and operating costs of a municipal electric utility. Because privately owned electric utilities have no such affiliations, they must pay in full for all services and operations performed for them.

PUBLICLY owned utilities, as to customers' accounting expenses, have the advantage of greater customer density in reading meters and collecting bills. They are not spread out all over the countryside where man-power and vehicle costs to reach the customers are heavy.

Publicly owned electric systems generally are quite apathetic toward the development and promotion of new business. The privately owned electric utilities have traditionally been the agencies through which new electric appliances have been introduced to the public. The public is slow to accept new and untried things.

Without the intensive sales promotion activities of the private electric utilities, in close collaboration with the manufacturers of appliances, the American public would not be so electrically minded today. Such activities cost money, but the customers of both the publicly and privately owned systems derive the benefit of appliances developed, demonstrated, and promoted through private enterprise.

The largest group of managerial expenses is the administrative and general series. One of the largest single items of administrative and general expense of a private electric utility is in employee wel-

fare and pension costs. This expense accounts for one-fourth to one-third of total administrative and general expenses of a private utility. National comparisons are not available, but official figures for utilities in the state of Wisconsin show that private electric utilities in 1951 spent \$2.80 per customer for employee welfare and pension expenses against \$1.01 for this purpose spent by publicly owned systems. It seems to be quite general knowledge in labor circles throughout the country that private utilities treat their employees better in all respects, including the level of base compensation, than do publicly owned utilities. And this affects not only management but all other groups of expenses.

THE *piece de résistance* in any comparison of private and public power is the matter of taxes. During 1951, privately owned electric utilities paid 21.8 per cent of their gross revenues in taxes while the publicly owned systems paid only 2.5 per cent.

Proponents of public power explain away this great difference by pointing to accounting inadequacies and inconsistencies of public power systems in recording taxes. They say that publicly owned utilities render much free or underpriced electric service to other municipal departments and often make donations to their local governments but that these things are not charged to taxes. It is claimed that in some cases if it were not for funds provided or donated by the electric utility department, the local government would have to raise general tax rates. Public power people say the free or underpriced services performed for other governmental departments and the donations to local governments are really payments in

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lieu of taxes and should be considered as taxes.

Consider first the free or underpriced service furnished to other branches of government. There is no way of telling how much service was underpriced but we do know what was recorded as "free." In 1951, the 266 publicly owned systems covered by the FPC statistical release furnished 47,446,000 kilowatt-hours without charge, presumably to other municipal agencies. If they charged the average rate per kilowatt-hour for this service that they got from their regular customers (1.52 cents), they would have increased their revenues by \$721,000. This amounts to less than one-fifth of one per cent of their gross revenues from ultimate customers. This does not improve the public power tax story much.

PUBLIC power advocates frequently seem to have some trouble in distinguishing between taxes, and return or "interest" on the investment the municipality has in the electric utility. Unless a payment, accrual, donation, or contribution of funds is distinctly labeled as taxes, and deducted from gross electric revenues along with other operating expenses and depreciation to determine net utility income, it is not taxes or a payment in lieu of taxes. It is a safe bet that any regulatory body would so find. Any payment out of net utility income is a distribution of the return on the investment, and calling such payment taxes or payment in lieu of taxes does not alter this fact.

Every municipality or other governmental unit owning a public utility has an investment in that utility whether in equity securities or in the surplus of the

utility. Such an investment is entitled to a return or "interest." If the municipality were to sell the utility, it could invest the proceeds in U. S. government bonds, in AT&T, or in any one of thousands of enterprises. But in every case, the interest or dividends on that investment would be return—and not taxes, or payments in lieu of taxes, or payments in reduction of the general tax rate.

The 266 publicly owned systems had a "return" or net electric utility operating revenues of \$120,430,000 in 1951, according to the FPC. It is interesting to observe that if they had been subject to federal income taxes, they would have had to earn a gross return of about \$227,000,000 *before* federal income taxes in order to have a net return of \$120,430,000 *left after* income taxes. They would have had to raise their rates by over 25 per cent to get the funds to pay the federal income taxes!

Even people sympathetic to public power will admit that the tax factor is heavily weighted against private power.

YES, making comparison is difficult unless all circumstances are carefully considered and weighed. Our ancestors learned this the hard way, and profiting by the mistakes they made has enabled those living today to more properly evaluate many things. In the case of the contending forms of utility ownership, it should be apparent to any thinking person that surface comparisons do not and will not reveal the true merits of the case. When the facts are disclosed and arrayed in their proper order, private power need make no apologies for its competitive position with respect to public power.

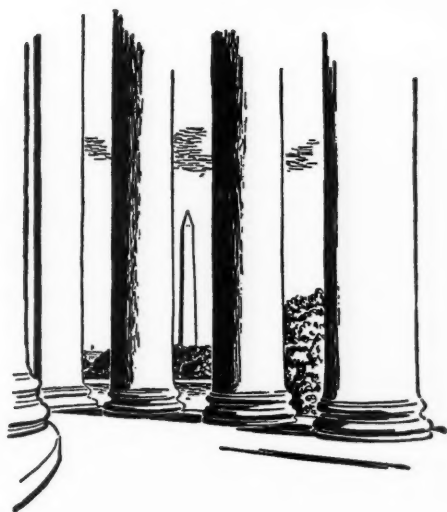
Washington and the Utilities

Ferguson's Gas Bill

A NUMBER of gas industry officials found very interesting, if not disturbing, reading, in a bill (S 3178) introduced late in March by Senator Ferguson (Republican, Michigan) for the ostensible purpose of preventing natural gas transmission companies from writing up the cost of their gas reserves. Ferguson said, in a statement about his bill, it would protect natural gas consumers (of whom there are a good many among the eligible voters of Michigan) from "tremendous rate increases," going into billions of dollars.

He noted that it has been a "long-established policy" in determining rates for natural gas transmission companies that they are entitled to a "fair return on the actual cost of natural gas reserves which they own and produce." Recently, however, he said, efforts have been made to persuade the FPC to permit the companies to charge the "full commodity value" for their gas. Ferguson expressed hope the FPC would reject these appeals, but he said the consumer should also be protected by specific legislation.

In other words, the Senator from Michigan is conceding that the Federal Power



Commission is already following the general practice of basing, for rate-making purposes, the cost of gas supply from company-owned reserves to the actual production cost of companies under the Natural Gas Act—as distinguished from the going field price of gas or so-called commodity cost. But Ferguson wants to spell it out in the Natural Gas Act so as to leave no doubt about the FPC ever changing its policy or modifying it in the future.

It is obvious to most Washington observers that such a controversial bill, introduced this late in the session, has virtually no chance of final enactment, in view of the opposition that would come from Congressmen representing gas-producing states. In fact, a sophisticated observer might harbor the suspicion that the Senator from Michigan may find the introduction of such a bill good campaign ammunition, in what may turn out to be a tough re-election fight in the gas-consuming state of Michigan. But when these negative factors have been considered, the long-range aspect on the future of federal regulation of gas transmission companies

PUBLIC UTILITIES FORTNIGHTLY

suggests that Senator Ferguson's bill must be taken quite seriously. True, the actual "protection" afforded would be limited to companies owning their own production, which is not as broad a coverage as Ferguson's remarks would indicate.

On the other hand, there is the very definite possibility that Federal Power Commission jurisdiction will be finally extended to independent producers if the U. S. Supreme Court decides, in its forthcoming reconsideration of the Phillips Petroleum Company Case. There had been some speculation that, in event the earlier court decisions in the Phillips Petroleum Case were left undisturbed, the FPC might resort to field prices as a short cut in taking over its suddenly vastly extended duties in the production field.

Using a spot date price approach, somewhat similar to the old Office of Price Administration's "hold-the-line" orders during the war emergency, the FPC could use field prices, at least as a working basis under the Natural Gas Act, for the preliminary establishment of its jurisdiction over producers. But Ferguson's bill might well complicate such a simplified approach, although it would take some first-rate legal research to determine whether it would, and to what extent.

FERGUSON said on the floor of the Senate on March 24th that the inspiration of his bill came from recent efforts "to persuade the Federal Power Commission to depart from this sound [cost production basis] philosophy of regulation and permit these companies to charge what is equivalent to the prevailing market price for their own gas." To demonstrate what it would cost consumers, he used a hand-picked differential figure of 13 cents per thousand cubic feet of gas, which was found applicable "in at least one instance." Apparently this single instance figure was

derived in some way from a brief prepared by the FPC's staff. But Senator Ferguson then proceeded to assume, for argument, that this might be an average figure, with the result "the total increase that may be paid by the gas user" could reach astronomical proportions.

He did say that he was advised by the common council of Detroit on this matter and had asked the FPC for exact figures on the cost differential as it might affect consumers in Michigan. The text of Ferguson's bill, which would amend § 6(a) of the Natural Gas Act, is very brief:

Be it enacted, etc., That § 6(a) of the Natural Gas Act (15 USC 717 e (a)) is amended by inserting before the period at the end thereof a colon and the following: "Provided, That the value for rate-making purposes of gas reserves held by any natural gas company shall in no case be deemed to exceed the actual original cost of such reserves to such company."

The Eisenhower Tax Bill

THE 10 per cent ceiling authorized by the House of Representatives on excise taxes for telephone monthly bills (formerly 15 per cent), telephone long-distance calls (25 per cent), passenger fares (15 per cent) remained in the tax bill as it cleared Congress just before the April 1st deadline. But there was plenty of backing and filling before the House accepted the further cut made on the floor of the Senate (by a vote of 64 to 23) on electric, gas, and oil appliances from 10 to 5 per cent.

The 5 per cent formula was a compromise one proposed by Senator Capehart (Republican, Indiana) and accepted by Senator Douglas (Democrat, Illinois), who had introduced an amendment to eliminate the excise tax on appliances.

WASHINGTON AND THE UTILITIES

The vote came at the end of a 5-hour session that included one of the liveliest debates heard for some time on the Senate floor, followed by a series of parliamentary snarls over the Capehart amendment, which came on the spur of the moment and took the Senate by surprise.

The earlier debate over the Douglas amendment featured Senator Millikin (Republican, Colorado), chairman of the Senate Finance Committee, and Senator Douglas as the chief protagonists, with Senators Humphrey (Democrat, Minnesota), Bush (Republican, Connecticut), Lehman (Democrat, New York), and others joining in.

The bill had to be enacted into law by midnight March 31st to maintain in effect certain taxes due to lapse automatically at that time. The items affected by the Senate amendment as accepted in conference, included: refrigerators, cooking ranges, and stoves, fans, water heaters, flat irons, air heaters, electric blankets, grills, toasters, broilers, mixers, juicers, food choppers and grinders, clothes driers, ironers, dehumidifiers, dish washers, floor polishers, waxers, mangles, garbage disposals, power lawn mowers, and home freezers.

This excise tax reduction bill must be distinguished from the general tax revision bill (HR 8300) which passed the House but is still marking time in the Senate. It contains more liberal provisions for tax depreciation deduction by corporations and some small tax exemption on corporate dividends paid to personal income taxpayers.

The Colorado Basin Plan Urged

THE Eisenhower administration has swung its support to a proposed billion-dollar power and reclamation project for the development of the Upper Col-

orado river basin. It is the first "new start" major proposal to win the approval of this administration. It differs, however, from previous federal project proposals of its kind in several respects, including an emphasis on local participation in power development and use.

The President's recommendations embrace construction of the controversial Echo Park dam and storage project in Dinosaur National Monument (\$176,400,000), which has been opposed by conservationists. The President also endorsed the Glen Canyon, Arizona, dam and storage project (\$421,300,000), and further recommended authorization by Congress of 11 irrigation projects (totaling \$304,356,000). The Eden project, already authorized (\$7,287,000), was included in the over-all basin development plan.

The President said the Upper Colorado river basin development calls for "sound financing." His recommendation of this proposal is said to be consistent with the administration's policy of federal construction of large multipurpose projects in those situations where a state or a group of states are unable to swing them, and where national interest requires action. The over-all program is designed to enable five states to carry out an interstate compact for sharing Colorado river water. Legislation now being drafted will set up a fund so that the entire project "will be constructed and paid for as a basin program."

"The development," the President said, "will conserve water, enabling the region to increase supplies for municipal uses, industrial development, and irrigation. It will develop much-needed electric power."

A House Interior subcommittee has delayed final action on approving the project after a dispute over recommended Budget Bureau changes.



NRLB Bans "Hit-and-run" Strikes

THE National Labor Relations Board recently ruled that a "hit-run" strike waged by members of the CIO Communications Workers of America telephone union was "a form of economic warfare entirely beyond the pale of proper strike activities." It was the first time the board had ruled on such tactics, which CWA has been depending on to assist its local unions in enforcing their demands against management. The technique of hit-and-run tactics is to create a series of little strikes suddenly throughout the system, so as to keep management off balance and unable to concentrate supervisory employees for substitute replacements.

Such a strike was called in the summer of 1951 against the Pacific Telephone & Telegraph Company. Traffic employees in a great many of the company's northern California division offices walked off their jobs on different days instead of all at the same time. At many offices they returned to work after a short time and then walked out again after a day or two; and in some offices they again returned to work and later quit anew a third time. Meanwhile, union pickets ranged over the entire division, appearing sporadically at a great number of offices. The use of this tech-

Wire and Wireless Communication

nique was made known in advance and, on that basis, the Order of Repeater-men and Toll Testboardmen decided to respect the CWA picket lines.

DURING the period this technique was used, the tollmen returned whenever the CWA pickets disappeared and offered to work. In most cases they were told by local supervisors that they were not needed or that their jobs were covered that day, but that they should report the following day. The tollmen's union complained to the NRLB that because the company did not put each tollman back to work immediately upon his offer to return, it discriminated against them for union activities.

The board ruled that the strike action was not a protected activity; that "because they joined in the unprotected strike of the traffic employees with knowledge of its planned intermittent and hit-and-run aspects, the tollmen also removed themselves from the protection of the (Labor) act." The board also said there was no proof that the company discriminated against the tollmen, and that even if there was proof the company's conduct would not have been unlawful, because the action was taken to protect the continuity of public service.

WIRE AND WIRELESS COMMUNICATION

THE vote of the NLRB was 3 to 1, Abe Murdock dissenting. Murdock said the majority's decision "goes far to deprive employees of rights guaranteed them by Congress and long since cemented into the law of the land." CWA President Beirne was more explicit in his denunciation of the board's action. "This was a gratuitous slap at CWA on the part of the board," said Beirne, "since they decided on the legality of strike tactic used by CWA, when CWA was not a party to the proceedings and was not given any opportunity for defense. By its action, the NLRB majority proves that it has become a tool for employers. Impartiality has departed from the NLRB." Beirne insisted that the fact that the company doesn't like the intermittent strike is no good reason for outlawing it.

Beirne saw the "hand of the Bell system companies" in the board's decision and promised a greater effort to convince Congress to amend the Taft-Hartley law in order "to restore its original intent regarding the right of workers to strike."

USITA Launches Advertising Campaign

THE United States Independent Telephone Association has launched a national advertising campaign to bring home to the American people the fact of the existence of an independent telephone industry with its own manufacturers, suppliers, directory publishers, trade press, and related services. The program is designed to acquaint the public with the extent of the industry in terms of communities served, stations in service, plant investment, stockholders, and employees.

The independent telephone industry believes it important to let the American people know what the accomplishments of the independent companies have been and

what their service objectives are for the future. The program will stress the fact that independent companies and their manufacturers are responsible for the development of numerous significant improvements in the communications art, such as the dial telephone, the telephone handset, selective ringing, city-to-city long-distance dialing, and neoprene jacketed drop wire.

The program is designed in part to improve the morale of independent telephone employees by giving them a sense of belonging—of being important parts of an essential industry whose existence is nationally known and respected. The public will be acquainted with the fact that the independent telephone industry has reached its present development under tenets of free enterprise in a free economy in the finest American tradition and that "the indomitable spirit which has inspired and motivated the industry up to now will continue eliminating the need for any socialistic or semisocialistic ventures at the expense of the overburdened taxpayer."

The advertising campaign will stress the need for realistic treatment and sympathetic public understanding of the revenue needs of a regulated business, in order that it may continue to attract necessary investor capital. It is hoped that the program will help to uncover and develop new sources of capital for expansion and improvement of telephone service — whether it be the small-town banker, the small-town investor, an insurance company, or any other financial source. However, USITA will be satisfied if its advertising campaign appreciably increases public awareness that the independent telephone companies are an indispensable part of the national telephone network and that without them and the service they provide the network would not be a complete one.

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Wire Tap Measure Clears Committee

MEMBERS of the House Judiciary Committee have finally agreed on a bill permitting the use of telephone wire taps in certain cases involving the national security. There had been a dispute over the extent of the Attorney General's authority to order such wire taps.

The original bill, authored by Representative Keating (Republican, New York), would have legalized information obtained by wire tapping in prosecuting spies, saboteurs, and traitors if the wire taps were made on orders of a federal court. Attorney General Brownell and FBI Director J. Edgar Hoover objected that the requirement of a court order would be too slow in most espionage cases. The committee approved, after limiting the wire-tapping authority to security cases, omitting kidnapping or extortion.

State Utility Authority Gains Support in Idaho

IDAHO voters will probably not be asked to vote in November on a proposal which, if approved, would put the state of Idaho in the power and communications business. Sponsored by a National Hells Canyon Association leader, the proposed "initiative" would create a state Power and Communications Development Commission, with authority to acquire all privately owned electric power, telephone, and telegraph facilities in the state.

In the language of the proposed "initiative," it is declared to be the policy of the people of Idaho "to develop the hydro-electric resources and communications systems of the state in a manner which will permit and achieve the optimum beneficial use of the water resources of the

state for multiple purposes and of the communications system . . ." Outlining the duties of the proposed state commission, the "initiative" states:

The commission is authorized and directed to acquire by purchase, condemnation, or otherwise, title to any or all property within the state of privately owned public utilities used in the generation, transmission, and distribution of electric energy; and on communications facilities; provided, however, that the commission may exclude personal property and nonoperating properties which are not, in the judgment of the commission, required to operate electric or communication facilities so acquired.

Within one year from the date on which this act becomes a law the commission shall submit to the governor a report containing a proposed schedule for acquiring and taking over the operation of any or all such properties.

Such properties may be acquired in such units, at such time, and in such manner as may be deemed advantageous by the commission.

In acquiring such property the commission may assume and agree to pay or perform any contracts or other obligations of the company from whom such property is acquired.

As of late March, advocates of this proposal had already succeeded in collecting only a handful of signatures out of 20,000 necessary to place it on the ballot in November. At this rate of progress, there was little chance of validating the necessary number of signatures before the July 2nd deadline. Idaho's governor and two Senators have come out against it, however, as well as farm, business, and tax-paying groups, along with political leaders of both parties.

Financial News and Comment

By OWEN ELY

Natural Gas Requirements And Supplies

THE bureau of statistics of the American Gas Association has issued a comprehensive 107-page survey entitled "Gas Requirements and Supplies of the Gas Utility and Pipeline Industry." This is the second comprehensive forecast of regional gas requirements and supply, being basically a continuation of the survey initiated in December, 1951, by the gas planning division of the Petroleum Administration for Defense. Direction of the new program has been provided by a special subcommittee of the committee on economics, consisting of industry representatives from important gas-marketing areas. It is hoped to make this an annual publication.

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The present study is somewhat comparable to the semiannual projections for the electric light and power industry currently prepared by the Cisler committee. The foreword of the AGA study states:

The availability of such statistics serves several vital purposes over and above possible governmental use. The derivation of comprehensive estimates of requirements and supplies, by geographic area, serves to highlight the possible development of gas shortages and to orient and substantiate applications for increased deliveries to meet demands of the household and industry. Additionally, such forecasts help to ensure adequate supplies of steel pipe and other needed materials by permitting suppliers to base their future plans upon quantitative and reliable estimates of the gas industry's construction needs.

THE report, which is based on returns from a questionnaire submitted to 164 gas utilities and pipelines, shows the actual or projected annual requirements by classes of consumer for 1952-56 (inclusive), and also the peak-day consumption for the heating seasons through the winter period of 1956-57. It also analyzes the existing and planned supply for meeting these requirements, forecasts anticipated expenditures for new facilities, the amount

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of steel required, gives data on underground storage, etc. The number of future residential and house-heating customers and their consumption requirements are estimated, and the amount of underground storage which the industry hopes to provide (as a means of handling the seasonal heating load) is described.

The forecasts were based on various assumptions, including normal weather conditions, continuation of general business activity at about the same level as currently, etc. It also assumes that necessary amounts of gas will become available from producers for the pipelines, and from pipelines for the distributors; in this connection allowance had to be made for the time lag in planning, obtaining regulatory approval, financing, and construction. The study also assumes that coal and oil prices will remain fairly stable; changes in gas prices are based on the estimates by each

individual company. Normal growth is expected to continue, although the 4-year program does not envisage space-heating saturation nor conversion of all industrial loads to gas. The report contains additional and more detailed explanations of the methods used in forecasting. The statistical conclusions of the survey may be summarized as follows:

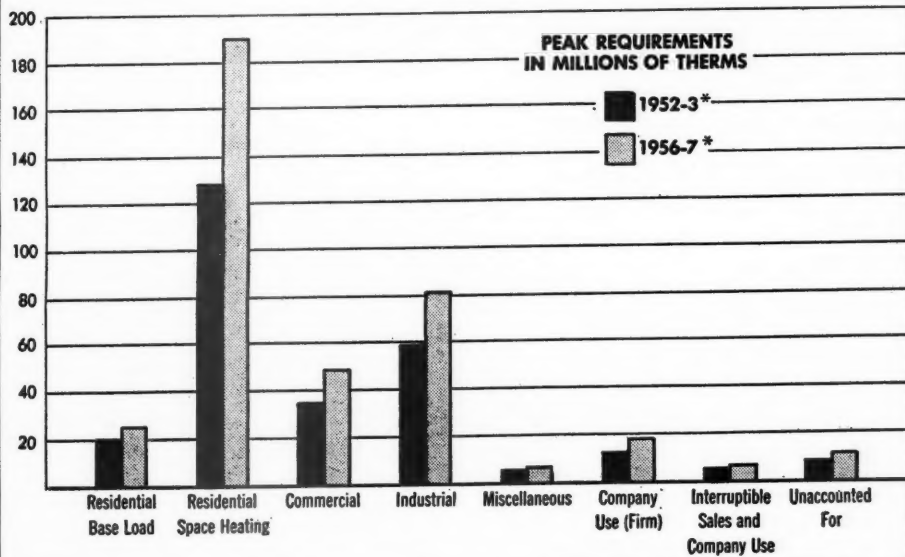
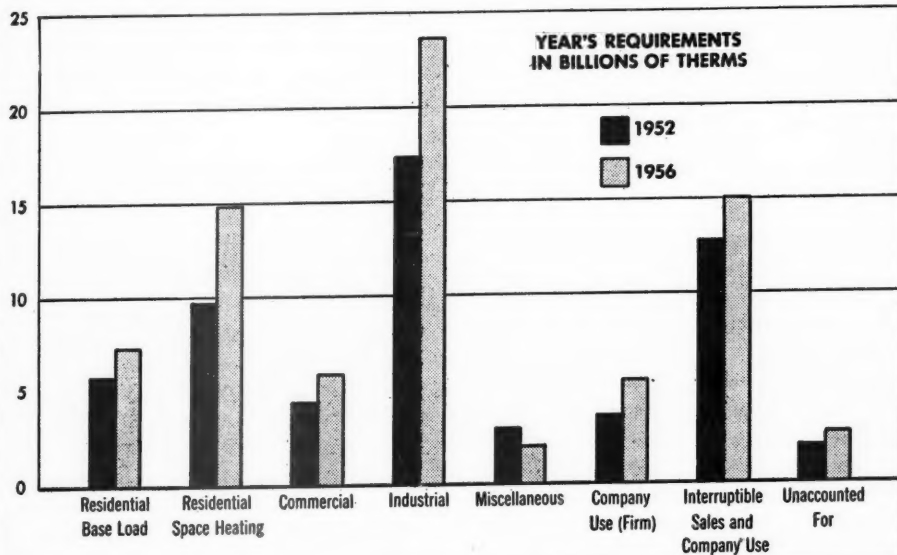
NATURAL gas sales are expected to represent 95 per cent of industry sales by 1956; actually, manufactured gas at that time will be reduced to only .7 per cent of the industry total, the remaining 4.3 per cent representing the use of natural gas for mixed gas.

By 1956 total natural gas requirements for all purposes (see chart and table, pages 495 and 496) are expected to aggregate 76.7 billion therms or about one-third more than the 1952 amount. Residential

GAS UTILITY AND PIPELINE CONSTRUCTION EXPENDITURES,
BY TYPE OF GAS AND BY PLANT FUNCTION, 1952-1956

Type of Gas and Plant Function	Actual 1952	(Millions) Forecast				Total Forecast 1953-1956
		1953	1954	1955	1956	
Natural Gas - Total	\$ 976	\$1,291	\$ 967	\$688	\$662	\$3,608
Production	111	142	55	43	41	281
Transmission	493	802	528	295	293	1,918
Underground Storage	43	38	54	27	15	134
Other Storage	1	1	2	3	1	7
Distribution	286	269	304	295	289	1,157
General	42	39	24	25	23	111
All Other Types of Gas - Total	91	118	90	82	79	369
Production and Storage	20	28	20	18	21	87
Transmission	3	8	4	4	3	19
Distribution	63	78	60	56	52	246
General	5	4	6	4	3	17
Total Industry - Total	1,067	1,409	1,057	770	741	3,977
Production and Other Storage	132	171	77	64	63	375
Transmission	496	810	532	299	296	1,937
Underground Storage	43	38	54	27	15	134
Distribution	349	347	364	351	341	1,403
General	47	43	30	29	26	128

ESTIMATED NATURAL GAS REQUIREMENTS IN 1956



Source: American Gas Association

* Winter heating season

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space-heating demands are expected to increase 54 per cent, but residential base load is expected to gain more slowly (28 per cent).

Total residential customers are expected to increase to 27,300,000 in 1956, a gain of 14 per cent. Of these customers 82 per cent will receive straight natural gas. The space-heating residential customers are expected to total 16,100,000, representing a gain of 38 per cent. Of these 15,100,000 will utilize natural gas. Estimated heating saturation of 67.2 per cent is forecast.

Underground storage in 1956 is expected to represent nearly one-quarter of total available supply, permitting withdrawals up to 92,600,000 therms on peak days. In Region No. 2 (Kentucky, New York, Ohio, Pennsylvania, and West Virginia) 53 per cent of peak-day supply will then be from underground storage and in Region No. 4 (Indiana-Michigan) 46 per cent.

At the end of 1952 about 11,700,000 homes were heated with gas and it was expected that an additional 1,000,000 would initially heat with gas in 1953. Because of the heavy winter heating load, four methods have been used to supply peak demands: (1) an increase in capacity

to meet winter demands, with excess gas being sold on an interruptible basis when not needed for heating usage; (2) above-ground storage of liquefied petroleum gas; (3) operation of high BTU manufactured gas plants when needed; and (4) use of underground storage facilities located near the marketing area.

THE first alternative has been widely used in areas where winter demand is too great to permit solution by LP-G storage or manufactured gas facilities, where no underground storage reservoirs are available, and where an adequate demand exists for low-cost interruptible service to industrial and other establishments.

Peak shaving equipment is frequently used in the initial stage after conversion to natural gas and in 1952 supplied about 3 per cent of the total requirements. This percentage is expected to be about the same in 1956, although dependence on these facilities will lessen in future as the major pipelines develop underground storage areas.

Underground storage is, of course, the most efficient method if appropriate locations are obtainable. Injections into storage age normally begin about April 1st and



ESTIMATED NATURAL GAS REQUIREMENTS IN 1956
AND INCREASES OVER 1952#

	Year's Requirements In Billions of Therms		Peak-day Requirements In Millions of Therms	
	1956	Incr. over 1952	1956-57*	Incr. over 1952-53*
Residential Base Load	7.3	28%	25	27%
Residential Space Heating	14.9	54	190	49
Commercial	5.8	35	48	41
Industrial	23.7	39	81	38
Miscellaneous	2.0**	D28	6	29
Company Use (Firm)	5.4	53	18	53
Interruptible Sales and Company Use ...	15.0	17	6	D3
Unaccounted for	2.6	34	11	42
Total	76.7	33%	385	42%

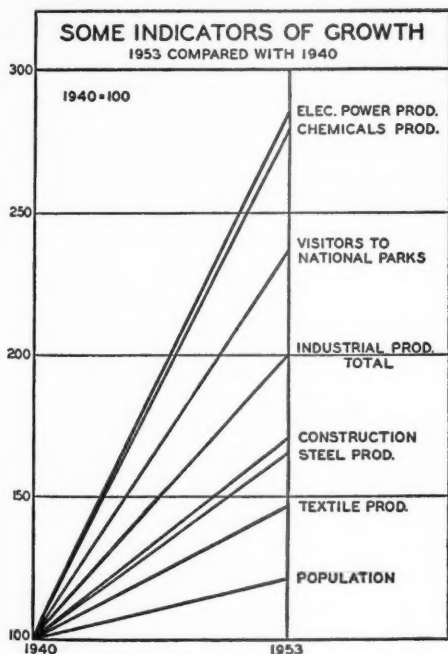
*Winter heating season. D—Decrease. **Including net input for underground storage.

Excluding natural gas sold for mixing or producing manufactured gas. See Table 8 of "Gas Requirements and Supplies."

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continue until November 1st, with withdrawals occurring predominantly during the remaining five months. This permits the utility to operate at an improved annual load factor, and also enables it to purchase gas from suppliers at a uniform daily amount, thus helping to reduce the over-all price. (Many contracts are predicated on the maximum expected daily demand with part of the price based on this demand, even where actual receipts fall short of the demand quantity; the ability to receive and dispose of this total contract demand will obviously lower the average price paid per MCF.)

The gas utility and pipeline industry expects to spend nearly \$4 billion for new facilities during 1953-56, or an average of \$800,000,000 annually, 90 per cent of this being for natural gas facilities. As shown in the table on page 494, over half of the latter amount is transmission.



Source, Cleveland Trust Co., Business Bulletin.

1953 Utility Earnings

FINAL figures are now available for the earnings of all class A and B electric and gas utilities for the calendar year 1953. For the electric utilities December proved a little disappointing, with a gain of only 3.8 per cent in net income over the previous year; but for the year as a whole net income increased 10.4 per cent over 1952, almost keeping pace with the increase of 11.3 per cent in net plant investment. The number of customers increased 3.1 per cent, sales of electric energy 7.5 per cent, and revenues 8.6 per cent.

The gas utilities made an excellent showing in December with a gain of 13.5 per cent in revenues and 20.4 per cent in net income. However, nearly half of the month's gain in net income was due to a reduction of federal taxes, presumably on year-end adjustments. For the calendar year net income gained 9.6 per cent although revenues were up 19.2 per cent. The greatly improved results for the gas companies in the past three months presumably reflect rate increases which have belatedly gone into effect. This seems indicated by the fact that December sales in cubic feet gained only 6 per cent over December, 1952, as compared with the 13.5 per cent increase in revenues. Columbia Gas has finally been able to obtain much needed rate increases from the Federal Power Commission and adjustments have been made for other companies.

Refunding 1953 High Coupon Issues

DURING the first half of 1953 the sharp rise in interest rates resulted in high coupon and dividend rates on a number of new issues of bonds and preferred stocks. Some \$350,000,000 bonds were sold with coupons of $3\frac{3}{4}$ to $4\frac{3}{8}$ per cent.

APRIL 15, 1954

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With the reversal of administration policy, interest rates have again declined almost to the low levels prevailing during the Truman régime, thus permitting the refunding of some of last year's issues.

Detroit Edison recently sold \$40,000,000 general and refunding 2½s due 1984, which were retailed at 99¼, to refund a

similar amount of 3½s issued last May. Directors of Long Island Lighting have authorized the company to refund two 5¼ per cent preferred stock issues totaling \$20,000,000, which are callable at 103 and 104, respectively.

Consolidated Edison proposes to redeem its Westchester Lighting 3½s of 1967



ELECTRIC UTILITY STATISTICS AND RATIOS

	Unit	Latest Month	Latest 12 Mos.	Per Cent Increase Latest Month	Per Cent Increase Latest 12 Mos.
Operating Statistics (January)					
Output KWH—Total	Bill. KWH	39.4	445.0	8%	11%
Hydro-generated	"	8.9	—	D4	—
Steam-generated	"	30.5	—	11	—
Capacity (January)	Mill. KW	91.5	—	—	11
Peak Load (November)	"	75.3	—	7	—
Fuel Use (January): Coal	Mill. Tons	10.9	—	4	—
Gas	Mill. MCF	67.4	—	12	—
Oil	Mill. Bbls.	8.3	—	8	—
Coal Stocks	Mill. Tons	45.6	—	10	—
Customers, Sales, Revenues, and Plant (December)					
KWH Sales—Residential	Bill. KWH	6.7	71	9%	11%
Commercial	"	4.5	53	6	9
Industrial	"	12.2	152	D3	8
Total, Incl. Misc.	"	30.4	357	2	8
Customers—Residential	Mill.	32.2	—	4	4
Commercial	"	4.5	—	2	2
Industrial	"	.5	—	2	2
Total, Incl. Others	"	39.5	—	3	3
Income Account—Summary (December)					
Revenues—Residential	Mill. \$	184	2,008	8%	11%
Commercial	"	122	1,424	5	8
Industrial	"	141	1,717	1	9
Total, Incl. Misc. Sales	"	489	5,662	5	9
Sales to Other Utilities	"	37	419	3	2
Misc. Income	"	32	212	D16	D8
Expenditures—Fuel	"	88	1,004	D1	10
Labor	"	101	1,143	5	6
Misc. Expenses	"	91	898	10	5
Depreciation	"	48	559	13	10
Taxes	"	95	1,308	—	8
Interest	"	30	348	12	11
Amortization, etc.	"	—	—	NC	NC
Net Income	"	105	1,046	4	10
Preferred Div. (Est.)	"	12	138	7	7
Bal. for Common Stk. (Est.)	"	73	908	4	12
Common Dividends (Est.)	"	53	635	10	8
Electric Utility Plant (December)	"	25,396	—	11	—
Reserve for Depreciation and Amort.	"	4,872	—	8	—
Net Electric Utility Plant	"	20,524	—	11	—
Life Insurance Investments (January 1st-February 27th)					
Utility Bonds	"	—	149	—	23%
Utility Stocks	"	—	18	—	D14
Per Cent of All Investments	"	—	10%	—	17

D—Decrease. NC—Not comparable.

FINANCIAL NEWS AND COMMENT

and New York Steam 3½s of 1963. The company expects to sell a refunding issue in the second week of May and hopes to effect a saving of one-half of one per cent in the interest rate, it is reported. Another objective will be to simplify the company's debt structure by substituting one of its own bonds for the guaranteed bonds of two former subsidiaries (which have since been merged with the parent company).

Utility companies which have a refunding program in mind should not put off the project too long. The bond market recently has shown some signs of becoming "tired," and some offerings, such as the Houston Lighting & Power 3s (offered on a 2.9 per cent basis), met with some resistance from institutional investors.

Competitive Bidding Again In the Limelight

THE SEC has proposed that public utilities whose financing is subject to

regulation at the state level should be exempt from federal supervision of their financing, and a final public hearing on the proposal was scheduled for March 31st. However, the hearings have resulted in broadening the whole issue and renewing the historic fight over competitive bidding. The firm of Morgan Stanley & Co. has filed a brief with the commission urging the abolition of compulsory bidding altogether. On the other hand, Representative Louis Heller (Democrat, New York) is opposed to any easing of the competitive bidding rule as contrary to the purpose of the Public Utility Holding Company Act.

Robert R. Young has also entered the picture recently, in connection with his fight to gain control of New York Central. Full-page ads in the New York papers over the name of Alleghany Corporation have described the benefits claimed for competitive bidding. However, the issue now before the SEC is very simple—it is an effort to eliminate double regulation.

DATA ON ELECTRIC UTILITY STOCKS

1953 Rev. (Mill.)		3/24/54 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay- out	Moody Bond Rating
\$223	S American Gas & Elec.	37	\$1.64#	4.4%	\$2.49**	6%	Dec.	14.9	66%	—
31	O Arizona Public Service ...	19	.90	4.7	1.27	19	Jan.	15.0	71	—
8	O Arkansas Mo. Power	20	1.12	5.6	1.63	21	Sept.	12.3	69	—
25	S Atlantic City Elec.	31	1.50b	4.8	1.97	15	Jan.	15.7	76	Aa
5	O Bangor Hydro-Elec.	30	1.80	6.0	2.06	29	Dec.	14.6	87	—
4	O Black Hills P. & L.	22	1.28	5.8	2.09	12	Jan.	10.5	61	—
82	S Boston Edison	52	2.80	5.4	2.96	D1	Dec.	17.6	95	Aaa
18	A California Elec. Power	10½	.60	5.7	.88	5	Dec.	11.9	68	A
14	O Calif. Oregon Pr.	28	1.60	5.7	1.70	1	Nov.	16.5	94	A
52	S Carolina P. & L.	44	2.00#	4.5	3.03	3	Feb.	14.5	66	A
21	S Central Hudson G. & E. ...	14	.70	5.0	.96	26	Dec.	14.6	73	—
15	O Central Ill. E. & G.	28	1.60	5.7	2.07	D11	Dec.	13.5	77	A
29	S Central Ill. Light	42	2.20	5.2	2.77	7	Dec.	15.2	80	Aa
39	S Central Ill. P. S.	21	1.20	5.7	1.40	1	Sept.	15.0	86	A
9	O Cent. Louisiana Elec.	22	1.00#	4.5	1.58	8	Dec.	13.9	63	Baa
27	O Central Maine Power	20	1.20	6.0	1.55	9	Feb.	12.9	77	A
96	S Central & South West	24	1.16	4.8	1.72	15	Dec.	14.0	67	—
9	O Central Vermont P. S.	15	.84	5.6	.85	D5	Feb.	17.6	99	A
89	S Cincinnati G. & E.	23	1.00#	4.3	1.56	10	Dec.	14.7	64	Aaa
5	O Citizens Utilities	18	.40a	5.2a	.98	13	Sept.	18.4	41	Ba
91	S Cleveland Elec. Illum.	59	2.60	4.4	4.07	18	Dec.	14.5	64	Aaa
3	O Colorado Cent. Power	23	1.20	5.2	1.52	13	Dec.	15.1	79	—
32	S Columbus & S. O. E.	29	1.60	5.5	2.15	9	Dec.	13.5	74	A
329	S Commonwealth Edison	39	1.80	4.6	2.38	10	Dec.	16.4	76	Aaa
9	A Community Pub. Service ..	21	1.00#	4.8	1.66	22	Sept.	12.7	60	—
1	O Concord Electric	36	2.40	6.7	1.89	D25	(c)	19.0	127	—

PUBLIC UTILITIES FORTNIGHTLY

1953 Rev. (Mill.)	(Continued)	3/24/54 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay- out	Moody Bond Rating
55	O Connecticut L. & P.	17	.88†	5.2	1.12	18	Feb.	15.2	79	Aaa
18	O Connecticut Power	41	2.25	5.5	2.41	2	Dec.	17.0	93	Aaa
454	S Consol. Edison	43	2.40	5.6	2.94	12	Dec.	14.6	82	Aa
98	S Consol. Gas of Balt.	28	1.40	5.0	1.74**	D4	Dec.	16.1	80	Aaa
158	S Consumers Power	42	2.20	5.2	3.16	31	Dec.	13.3	70	Aa
57	S Dayton P. & L.	40	2.00	5.0	2.63	D8	Dec.	15.2	76	Aa
28	S Delaware P. & L.	29	1.40	4.8	1.85	15	Jan.	15.7	76	Aa
192	S Detroit Edison	31	1.60	5.2	1.93	17	Jan.	16.1	83	Aa
107	A Duke Power	43	1.85	4.3	3.11	30	Dec.	13.8	59	Aaa
82	S Duquesne Light	31	1.60	5.2	2.22	8	Dec.	14.0	72	Aaa
27	O Eastern Util. Assoc.	31	2.00	6.5	2.42	D1	Jan.	12.8	83	—
2	O Edison Sault Elec.	10	.50	5.0	.72	1	Sept.	13.9	70	—
9	O El Paso Electric	30	1.60	5.3	2.17	11	Jan.	13.8	74	A
10	S Empire Dist. Elec.	24	1.40	5.8	2.12	7	Dec.	11.3	66	Baa
4	O Fitchburg G. & E.	49	3.00	6.1	2.80	D7	Dec.	17.5	107	—
32	S Florida Power Corp.	32	1.50	4.7	1.89	26	Dec.	16.9	80	A
70	S Florida P. & L.	43	1.60	3.7	3.07	8	Dec.	14.0	52	A
156	S General Pub. Util.	30	1.70	5.7	2.30	13	Dec.	13.0	74	—
5	O Green Mt. Power	25	1.30	5.2	1.83	3	Sept.	13.7	71	Ba
43	S Gulf States Util.	29	1.20	4.1	1.87	35	Jan.	15.5	64	Aa
21	A Hartford E. L.	55	2.75	5.0	3.29	32	Dec.	16.7	84	Aaa
4	O Haverhill Elec.	41	2.50†	6.1	2.71	5	(c)	15.1	92	—
53	S Houston L. & P.	34	1.20	3.5	1.92	16	Feb.	17.7	63	Aa
6	O Housatonic P. S.	23	1.40	6.1	1.52	5	(c)	15.1	92	—
22	S Idaho Power	49	2.20	4.5	3.35	22	Dec.	14.6	66	Aa
62	S Illinois Power	44	2.20	5.0	2.77	6	Jan.	15.9	79	A
35	S Indianapolis P. & L.	44	2.20	5.0	3.11	D1	Sept.	14.1	71	A
17	S Interstate Power	11	.64	5.8	.91	2	Dec.	12.1	70	Baa
23	O Iowa Elec. L. & P.	21	1.20	5.7	1.63	15	Jan.	12.9	74	—
28	S Iowa-Ill. G. & E.	31	1.80	5.8	2.26	4	Nov.	13.7	80	Aa
29	S Iowa Power & Light	26	1.40	5.4	1.94	11	Dec.	13.4	72	Aa
25	O Iowa Pub. Service	25	1.40	5.6	1.86	16	Jan.	13.4	75	A
11	O Iowa Southern Util.	20	1.20	6.0	1.61	16	Jan.	12.4	74	Baa
46	S Kansas City P. & L.	35	1.80	5.1	2.42	11	Dec.	14.5	74	Aaa
22	O Kansas Gas & Elec.	42	2.00	4.8	3.44	19	Jan.	12.2	58	A
34	S Kansas Pr. & Lt.	20	1.12	5.6	1.32	D7	Dec.	15.1	85	Aa
31	O Kentucky Utilities	21	1.12	5.3	1.69	15	Dec.	12.4	66	A
6	O Lake Superior D. P.	35	2.00	5.7	2.80	9	Dec.	12.5	71	A
6	O Lawrence Electric	30	1.70†	5.7	2.38	D10	(c)	12.6	71	Aa
67	S Long Island Lighting	19	1.00	5.3	1.23**	D2	Dec.	15.4	81	A
39	S Louisville G. & E.	44	1.80	4.1	3.28	14	Dec.	13.4	55	Aa
6	O Lowell Elec. Lt.	57	3.35†	5.9	3.63	D2	(c)	15.7	92	—
8	O Lynn G. & E.	29	1.60	5.5	2.14	14	Dec.	13.6	75	Aa
6	O Madison G. & E.	37	1.60	4.3	2.71	10	(c)	13.7	59	Aa
3	A Maine Public Service	23	1.40	6.1	1.79	32	Jan.	12.8	78	Baa
5	O Michigan G. & E.	33	1.35#	7.1a	2.83	2	Sept.	11.6	48	Baa
127	S Middle South Util.	28	1.40	5.0	1.99	14	Jan.	14.1	70	—
20	S Minnesota P. & L.	22	1.20	5.5	2.02	22	Jan.	10.9	59	A
2	O Miss. Valley P. S.	24	1.40	5.8	2.14	16	Feb.	11.2	65	—
9	A Missouri P. S.	32	1.80	5.6	2.37	13	Dec.	13.5	76	—
5	O Missouri Utilities	20	1.00	5.0	1.63	4	Dec.	12.3	61	—
31	S Montana Power	34	1.60	4.7	2.61	D5	Jan.	13.0	61	Aa
16	A Mountain States Pr.	19	.84	4.4	1.35	18	Dec.	14.1	62	Baa
117	S New England Elec.	15	.90	6.0	1.22**	D2	Sept.	12.3	74	Baa
38	O New England G. & E.	16	1.00	6.3	1.39**	11	Jan.	11.5	72	Baa
41	O New Orleans P. S.	42	2.25	5.4	2.92	5	Nov.	14.4	77	A
2	O Newport Electric	37	2.00	5.4	3.00	5	Jan.	12.3	67	—
68	S N. Y. State E. & G.	37	1.90	5.1	2.56	13	Jan.	14.5	74	A
204	S Niagara Mohawk Power ..	29	1.60	5.5	2.03	16	Dec.	14.3	79	Aa
63	O Northern Ind. P. S.	28	1.60	5.7	2.41	3	Jan.	11.6	66	A
110	S Northern States Pr.	15	.80	5.3	1.10	8	Dec.	13.6	73	Aa
8	O Northwestern P. S.	15	.90	6.0	1.26	D10	Dec.	11.9	71	A
109	S Ohio Edison	41	2.20	5.4	2.90	15	Feb.	14.1	76	Aa
35	S Oklahoma G. & E.	29	1.50	5.2	1.87	3	Jan.	15.5	80	A
14	O Otter Tail Power	26	1.50	5.8	2.19	5	Jan.	11.9	68	—

FINANCIAL NEWS AND COMMENT

1953 Rev. (Mill.)	(Continued)	3/24/54 Price About	Div. Rate	Cur- rent Yield	Share Cur. Period	Earnings* % In- crease	12 Mos. Ended	Price- Earnings Ratio	Divi- dend Pay- out	Moody Bond Rating
364 S	Pacific G. & E.	42	2.20	5.2	3.12**	24	Dec.	13.5	71	Aa
22 O	Pacific P. & L.	23	1.20	5.2	1.73	D4	Dec.	13.3	69	Baa
106 S	Penn Power & Light	42	2.40	5.7	3.09	26	Feb.	13.6	78	A
8 A	Penn. Water & Power	39	2.00	5.1	2.13	D8	Dec.	18.3	94	A
187 S	Philadelphia Elec.	36	1.80	5.0	2.36	7	Dec.	15.3	76	Aaa
27 O	Portland Gen. Elec.	36	2.00	5.6	2.54	6	Jan.	14.2	79	Baa
50 S	Potomac Elec. Power	18	1.00	5.6	1.15	3	Dec.	15.6	87	Aa
56 S	Pub. Serv. of Colo.	35	1.60	4.6	2.34	6	Dec.	15.0	68	Aa
230 S	Pub. Serv. E. & G.	27	1.60	5.9	1.80	15	Dec.	15.0	89	Aa
59 S	Public Serv. of Ind.	38	2.00	5.3	2.33	9	Jan.	16.3	86	Aa
21 O	Public Serv. of N. H. ...	30	1.80	6.0	1.80	D14	Feb.	16.7	100	Aa
8 O	Public Serv. of N. M. ...	12	.68	5.7	.81	14	Sept.	14.8	84	—
20 O	Puget Sound P. & L.	28	1.50	5.4	1.89	28	Jan.	14.8	80	Baa
46 S	Rochester G. & E.	44	2.24	5.1	3.30	23	Dec.	13.3	68	A
11 O	Rockland L. & P.	13	.60	4.6	.68	11	Sept.	19.1	88	A
7 S	St. Joseph L. & P.	21	1.20	5.7	1.73	15	Dec.	12.1	69	A
36 O	San Diego G. & E.	16	.80	5.0	1.17	2	Jan.	13.7	68	Aa
7 O	Sierra Pacific Pr.	34	2.00	5.9	2.58	D1	Jan.	13.2	78	Baa
140 S	So. Calif. Edison	41	2.00	4.9	2.66	D10	Dec.	15.4	75	Aa
29 S	So. Carolina E. & G.	16½	.80	4.8	1.15	45	Dec.	14.3	70	Baa
5 O	Southern Colo. Pr.	14	.70	5.0	1.16	25	Nov.	12.1	60	—
180 S	Southern Company	17	.80	4.7	1.24	8	Feb.	13.7	65	—
13 S	So. Indiana G. & E.	27	1.50	5.6	2.21	18	Jan.	12.2	70	Aa
1 O	Southern Utah Power	15½	1.00	6.5	1.18	D28	Jan.	13.1	85	—
3 O	Southwestern E. S.	18	.96	5.3	1.51	9	Feb.	11.9	64	—
31 O	Southwestern P. S.	25	1.32	5.3	1.73	20	Jan.	14.5	76	A
17 A	Tampa Electric	55	2.80	5.1	3.55	6	Jan.	15.5	79	Aa
109 S	Texas Utilities	49	2.08	4.2	3.37	14	Jan.	14.5	62	Aa
34 S	Toledo Edison	13	.70	5.4	.93	—	Dec.	14.0	75	A
10 O	Tucson G. E. L. & P.	19	.92	4.8	1.40	15	Dec.	13.6	66	—
103 S	Union Elec. of Mo.	24	1.20	5.0	1.36	11	Dec.	17.6	88	Aa
27 O	United Illuminating	47	2.40†	5.1	2.89	6	Dec.	16.3	83	—
2 O	Upper Peninsula Pr.	19	1.20	6.3	1.49	7	Dec.	12.8	81	Baa
30 S	Utah Power & Light	37	2.00	5.4	2.61	1	Jan.	14.2	76	A
84 S	Virginia E. & P.	30	1.40	4.7	1.78	13	Dec.	16.9	79	Aa
22 S	Washington Water Pr.	28	1.60	5.7	1.81	10	Feb.	15.5	88	A
115 S	West Penn Elec.	39	2.20	5.6	3.44	7	Jan.	11.3	64	—
62 O	West Penn Power	42	2.10†	5.0	2.58	5	Dec.	16.3	81	Aa
9 O	Western Lt. & Tel.	28	1.60	5.7	2.56	31	Nov.	11.0	63	A
22 O	Western Mass. Cos.	35	2.00	5.7	2.58	22	Jan.	13.6	78	—
84 S	Wisconsin Elec. Pr.	30	1.50	5.0	2.01	4	Dec.	14.9	75	Aa
31 O	Wisconsin P. & L.	23	1.20	5.2	1.65	15	Sept.	13.9	73	A
30 S	Wisconsin Pub. Ser.	20	1.10	5.5	1.54	13	Dec.	13.0	71	A
Averages				5.3%				14.2	75%	

Foreign Companies††

\$187 S	American & Foreign Pr. ..	10	\$.60	6.0%	\$2.36	22%	Sept.	4.2	25%	—
170 A	Brazilian Trac. L. & P.	8	.03b	—	2.96	20	(c)	2.7	—	—
53 A	British Columbia Pr.	20	1.00	5.0	1.45	NC	Sept.	13.8	69	—
15 A	Gatineau Power	23	1.20	5.2	1.62	25	(c)	14.2	74	Baa
26 O	Mexican L. & P.	9	—	—	—	—	—	—	—	—
9 A	Quebec Power	22	1.20	5.5	1.57	23	Dec.	14.0	76	Baa
42 A	Shawinigan Water & Pr. ..	40	1.45	3.6	2.26	17	Dec.	17.7	64	Baa

B—Boston Exchange. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. NC—No comparable figures available. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. Tax savings resulting from accelerated amortization of defense facilities are excluded (when separately reported). **Based on average number of shares. a—Also regular annual 3 per cent stock dividend, which is included in the yield. b—Also 5 per cent stock dividend. c—Calendar year 1952. #—Also occasional stock dividends. †Estimated (rate irregular or includes extras). ††With exception of American & Foreign Power, these stocks are also listed in Canada, and the Canadian prices are here used. (Curb prices are affected by exchange rates, etc.)



What Others Think

Urban Transit Control and Financing Trends

CURRENT and prospective developments in the field of urban transit regulation and financing, as reported from state capitals and municipalities throughout the country, include the following:

California

Seriousness of the problems confronting transit operations was stressed by Verne Scoggins, member of the California Public Utilities Commission, in a recent address in Stockton. He asserted:

To put it bluntly, the transit industry is caught in a vicious circle, with no escape in sight. People have been changing their shopping habits and their travel habits, just as they have changed their home routines with the advent of television.

As a result of this transition, the established transit companies have been parading to the commission seeking relief. For the most part, they have acted in desperation.

We have reached a point in this transition where proof is abundant that when fares increase, the number of passengers decrease. When there is a decrease in passengers in these days of rising costs, the transit company has but two alternatives—to return to the commission and ask for another increase or request permission to curtail service.

If either request is granted, three things usually happen: The public is further inconvenienced. More privately owned automobiles pour out onto our streets and highways during the rush hours. And, lastly, the company experiences a further decline in business and prepares to start around the circle again.

The commission believes there is need in every community for a re-evaluation of the rôle of private transit companies.

Advocating community interest in the problem, Scoggins noted that the commission has been urging a co-operative approach to mass transportation problems in the state, adding that the state legislature also has shown an interest. Scoggins said the problem exists not only in Stockton, but in Fresno, Sacramento, Oakland, Berkeley, and many other cities.

Colorado

IN Denver, where fares recently were boosted to 15 cents or four tokens for 55 cents, the Denver Tramway Corporation announced service improvements on six existing lines and inauguration of a new route in southwest Denver, effective March 1st.

A company spokesman said the improvements would be effected with equipment already owned by the company, well

WHAT OTHERS THINK

in advance of delivery of a fleet of 50 new diesel busses, purchased for \$1,000,000.

Scheduled for delivery on or before June 1st, the new busses will be used to implement an order by the state public utilities commission for the company to add another 440,000 route miles a year to its system by July 1st.

In granting increased Denver fares, the commission said they should give the company a 6.93 per cent rate of return on a \$12,000,000 "fair value" of the company's property.

Connecticut

PAUL A. RUST, president of the Connecticut Railway & Lighting Company, recently announced his company would seek a bus fare increase in Waterbury because "we're going broke." He said the company would ask the state public utilities commission to abolish the present 12½-cent token and allow a flat 15-cent cash fare with a few isolated exceptions. The proposed fare boost would be the company's third since 1945.

Massachusetts

A BILL backed by Governor Herter to assess fixed charges of the deficit-burdened Boston Metropolitan Transit Authority permanently on the 14 cities and towns in the transit district, and to change the law so that this portion of the debt will not be considered in fixing fares, was favorably reported to the Massachusetts legislature by its committee on metropolitan affairs.

The bill was revised by the committee to provide that if in future years the fares bring in revenue in excess of operating costs, this money may be used to reduce the annual fixed charges. There is a stipulation that the MTA amass a surplus of \$2,000,000 before any money can be utilized to cut either the fixed charges or the fares.

If the bill is enacted by the legislature, it would be a major victory for Herter, since it would mean that only a minor fare increase would have to be imposed to meet current operating losses of the road. A boost of 1½ cents to bring the average fare to 16½ cents is being considered, a schedule that would apply to tokens. Cash fares would be 20 cents.

Passage of the legislation, for the present, would mean nothing to the communities in the transit district as far as their tax rates are concerned. Under existing law, they must pay a proportional percentage of the fixed charges as well as the operating deficit. To these communities, the bill is only a bookkeeping maneuver.

To trustees of the MTA, the bill means that they must assess a fare increase only on the basis of a \$3,000,000 annual loss (using the 1953 deficit figures as a basis) rather than about \$9,000,000.

ALSO favorably reported by the same legislative committee was a bill aimed at diverting \$2,000,000 a year from state gasoline tax revenue to reduce the MTA deficit.

A record \$9,200,000 deficit was piled up by the MTA last year, the state tax commission estimated early this year as it advised assessors of the 14 cities and towns within the transit district that they would be assessed for this staggering loss, an unofficial figure \$1,381,000 greater than the deficit suffered by the road in 1952.

In 1952, however, a favorable court decision on federal income taxes and a \$100,000 dividend on workmen's compensation insurance reduced the total deficit by \$1,176,171.

The 1952 actual operational loss was \$9,005,216—slightly under \$200,000 less than last year's estimated deficit.

Shouldering nearly two-thirds of the

PUBLIC UTILITIES FORTNIGHTLY

burdensome transit deficit this year, Boston will reimburse the state slightly more than \$6,000,000 for this single item. It will account for approximately \$4.20 in the city's tax rate.

Part of the 1953 deficit is \$800,000 in payment on the principal of the huge bundle of outstanding debts of the MTA. The remaining \$8,400,000 deficiency represents operating losses and interest on debts, according to tax commission figures.

Mississippi

THE state supreme court recently ruled that the Jackson City Lines have full rights to operate in Jackson without competition from a line that has no franchise.

The high state court rejected the contention of J. R. Payne, Jr., operator of two bus lines, that any person has the constitutional right to operate a bus line over city streets.

New York

ALTHOUGH pointing out that city-owned lines this year would produce an estimated surplus of about \$4,500,000 if the city is not forced to agree to the pay and other increases demanded by its labor force, the New York City Transit Authority warned of the prospect of a future deficit if matters continued as at present.

The authority said, however, that it was determined not to increase the fare above the present 15 cents. It pointed to the annual loss of about 2 per cent of its passengers, which, it declared, is the common experience through the nation.

The authority described the demands of labor unions for higher pay and other benefits as "utterly fantastic." Proposals by the Transit Workers Union would increase costs by about \$85,000,000 and by the Amalgamated Association of Street, Electric Railway, and Motor Coach Employees about \$99,000,000.

APRIL 15, 1954

Ohio

VOTERS of the city of Columbus will be asked at the November election to approve a cost-of-service franchise and give the city council the right to award it to any qualifying company.

Texas

TRANSIT fare problems were turned over by the Dallas city council to a five-man committee of councilmen and an advisory committee of businessmen.

The council's action came after the Dallas Railway & Terminal Company petitioned to negotiate another fare increase and asked for elimination of its city gross receipts tax payments. The action was a departure from usual procedure in utility matters, which generally have been referred directly to City Public Utilities Supervisor J. W. Monk for recommendations.

Although it did not request a specific increase, DR&T asked to negotiate with city representatives for a schedule that would produce \$8,958,412 gross revenues this year and \$9,017,412 next year. The company also proposed to "streamline" its service by replacing all streetcars within two years through addition of 125 new busses at a cost of \$2,500,000, but it said a fare increase would be needed regardless of this planned expansion.

The transit firm's request said DR&T would be \$600,412 short in its depreciation and return funds this year and \$821,412 short next year if it continues under the present system. It was the eighth time since 1946 that the firm has sought higher basic fares, with seven basic increases granted. Last year, the present city council refused the firm's request to increase cash fares from 15 cents to 20 cents, but granted a 5-cent zone fare and the weekly \$1.25 "pass" system.

Since the system was started in 1943,

WHAT OTHERS THINK

DR&T has paid \$2,200,000 in gross receipts taxes to the city. Last year, it paid \$319,367 and estimates for the next two years total \$582,000.

Should these substantial payments be lost, it was reported that Dallas would be faced with raising the tax rate between 3 and 4 cents, the amount needed to make up the lost revenue. DR&T pays 4 per cent of receipts from bus operations and 2 per cent on streetcars.

The company labeled the tax a "privilege tax," a privilege for using streets used by DR&T's "most formidable competition," the 257,000 passenger cars registered in Dallas county.

Utah

THE state public service commission has under consideration an application by Salt Lake City Lines for increased rates. The proposed schedule would increase the present single-trip fare from 10 cents to 15 cents, provide for two tokens for 25 cents, eliminate student fares of 5 cents, continue the present fare for children under 12 at 5 cents, and eliminate weekly passes which now cost \$1.75.

The company's case for the increase was based on continued declining patronage and revenues. Calvin L. Rampton, company counsel, told the commission that revenues for the period from last August 1st through December showed a decline of 12.18 per cent and that February revenues showed a decline of 12.5 per cent. Rampton pointed out that the company, in its projection of revenues at hearings last fall, estimated a decline of only 10.39 per cent.

The company has been operating in the red during February, Rampton declared, with operating cost per mile being 42.55 cents and the revenue 42.27 cents.

D. S. Peck, regional manager for National City Lines, which owns Salt Lake

City Lines, said that operating revenues for January amounted to \$142,743 and operating expenses, including taxes, to \$139,964, which left an income, after adding \$189 of nonoperating revenues, of only \$2,968 for the month.

Virginia

RICHMOND's city council was petitioned by the Virginia Transit Company for a 15-cent cash fare and a decrease of 40 per cent in the gross receipts tax imposed by the city. Present cash fare is 13 cents with four tokens for 50 cents. The company also requested that the weekly pass be increased from \$2.25 to \$2.50, and that the price of school tickets be increased from 20 tickets for \$1.25 to 20 tickets for \$1.50.

Lee F. Davis, vice president and manager of the Richmond division of VTC, said there had been a steady decline in the number of revenue passengers since January 1, 1953. He said the number of passengers in 1953 declined by 3,662,178, or 8 per cent, from the number carried in 1952.

Since 1949, when the peak number of 81,000,000 passengers was carried, the decline in riders through 1953 was 48 per cent, he added.

The requested reduction of gross receipts rate from 5 to 3 per cent would cost the city treasury some \$95,000 on the basis of collections from this source of \$238,806.69 for the fiscal year ended June 30, 1953, it was reported.

Rate increases were granted in 1948, 1949, and 1952 when it was shown that riders declined and the cost of operation increased. The city council indicated that it felt the company was entitled to a fare that will give a fair return. At this writing, a reappointed transit committee, which worked on the VTC case a year ago, had the company's petition under study.

PUBLIC UTILITIES FORTNIGHTLY

Washington

SEATTLE Transit Commission Chairman Willard Maxwell said the Seattle Transit System faces a \$650,000 deficit this year on the basis of present fares, but it plans changes to assure at least a "break-even" operation.

Maxwell said that one big change will be adoption of a zone-fare plan to "relate fares to length of ride," adding that other steps planned by the commission include: purchase of new equipment; request relief from the \$200,000 annual occupation tax which the system now pays to the city; "do an aggressive selling job through advertising and promotion"; and "effect economies in operations wherever possible."

The threatened \$650,000 deficit stemmed from an 11-cent-an-hour wage increase granted employees in November, Maxwell said, noting that comparable wage increases were granted other city employees. While the system has set aside \$4,300,000 to replace equipment as it wears out, Maxwell said, it would be "folly to use this money to meet annual operating deficits."

The chairman's statement followed a transit system report which showed that the system carried 11.55 per cent fewer revenue passengers last year than in 1952.

West Virginia

THE state public service commission authorized a 5 per cent increase in intrastate fares on all except four of Consolidated Bus Lines' routes in southern West Virginia, effective February 23rd.

The commission authorized higher fares on all routes except those between Logan and Huntington, Bluefield and Welch, and Williamson and Welch.

The minimum increase will be 5 cents, under the commission's order, except that existing 10-cent fares will remain un-

changed where a passenger does not ride more than two miles. Fare boosts ranging from 10 to 25 cents on the four routes exempted in the order were made permanent under a commission order last April, when Consolidated sought a general increase.

While the case was pending, interim increases were authorized on the four routes. The commission made the interim rates permanent last April, but dismissed the general increase case. Consolidated again asked for a general increase, when it said that business conditions in its coal field territory were bad and declared that the increases granted in April had failed to yield the additional revenue anticipated.

Wisconsin

FOLLOWING the Transport Company's application to the state public service commission for a substantial new fare increase in Milwaukee, Mayor Zeidler announced he would appoint a special commission to investigate the city's transit problems.

Contending that it was entitled to and must receive a 7 per cent net return on its rate base to provide adequate service, the utility said that its estimated 1954 net operating revenues would be only \$85,769, which would be a net return of .58 of one per cent.

John H. Lucas, company president, said the company would have to earn a net return of approximately \$1,025,000 to show a 7 per cent return on its base. Last May, the company applied to increase its weekly pass from \$2 to \$2.25 and to increase its cash fare from 15 cents to 20 cents. The commission in November approved a 10-cent increase in pass prices but left the cash fare at 15 cents.

Lucas said that the "rates approved in November have proved to be too low. Our gross revenues have been dropping at the rate of \$1,400,000 a year. If we are to

WHAT OTHERS THINK

continue to give Milwaukee good transportation service, we shall have to have more revenue."

His only indication of what he believed the rates should be was his criticism of the commission's failure to grant the 20-cent cash fare last year. "If Milwaukee is to have public transportation comparable to that in other cities this size, it will have to pay what they pay for the service," Lucas said, adding that other cities with a 20-cent cash fare included Chicago, Minneapolis, Kansas City, St. Louis, Detroit, Cincinnati, Seattle, and Pittsburgh.

ZEIDLER and City Attorney Walter Mattison said continued increases in rates would not help. "The Transport Company already has lost one-third of the riders it had in 1945," Mattison said. "Raising rates . . . would simply mean that mass

transportation would be priced out of the reach of the average patron. We think service could be vastly improved. Ways could be found of making mass transportation more attractive. The damage already done by fare increases has been almost disastrous."

"The time has come," Zeidler said, "when the whole question of mass transit, as related to the use of private motor vehicles, must be studied."

"We are going to spend considerable sums for parking lots in the downtown district and at other major points of congregation. But the problem cannot be solved exclusively by providing parking facilities for private automobiles."

"What is happening is that we are killing the vital function of public transportation. It is only a stand-by service for many, but it is the only service for some."

Out of the Mailbag

Industry Handles the Load

THE article of Clarence A. Davis, entitled "A New Look at Federal Power Policy," is encouraging in many ways to those who hope the destruction of governmental competition will cease soon. However, there are some disturbing fallacies taken for granted in it. Mr. Davis said, "it must be remembered many of these projects are of such financial magnitude that they are beyond the capacity to finance of any company or agency except the federal government." This is not true. In fact the utility industry in many quarters has just breathed a sigh of relief that such an excuse for socialism in government had been completely disproven. OVEC is being privately financed for some \$420,000,000, and even larger projects can be so financed.

In the telephone business AT&T just sold about \$600,000,000 debentures (not even mortgage secured).

—ROBERT A. GILBERT,
Manager, utility division, National

*Securities & Research Corporation,
New York 5, New York.*

On the New Format

I WANT to take this opportunity to congratulate you and the FORTNIGHTLY staff on your 25th anniversary. During the years the FORTNIGHTLY has supplied an excellent service to the public utility industry and has attained an enviable position of eminence and reliability.

We here at NAEC are particularly pleased with your new format and make-up. It certainly makes a most readable "product," complete with your larger sketches and department arrangements.

We wish you many, many more years of continued success.

—P. L. SMITH,
*President, National Association
of Electric Companies,
Washington 6, D. C.*



The March of Events

President Signs Gas Carrier Bill

PRESIDENT Eisenhower reasserted his preference for state over federal controls "wherever possible" in signing a bill recently banning federal regulation of pipeline carriers transporting natural gas within a state's boundaries.

The legislation, hotly contested in Congress for nearly a year, delegates to state regulatory commissions the authority now held by the federal government over gas rates and services.

The bill was passed by the House last summer and by the Senate on March 15th. Senator Thomas Burke (Democrat, Ohio), a leading opponent, contended during Senate debate that it would cost consumers millions of dollars by placing some distributors under state regulation instead of under the Federal Power Commission. Senator John W. Bricker (Republican, Ohio) replied that Congress, in passing the Natural Gas Act, never intended that the commission should regulate utilities within state lines, but a 1950 Supreme Court decision threw doubt on this conclusion.

Apparently mindful of the division of opinion in Congress, the President issued a statement saying he had signed the bill because of his conviction that the interests of the individual citizen would be "better protected when they remain under state and local control than when they are regu-

lated or controlled by the federal government."

"I shall support state regulation of functions and matters which are primarily of local concern whenever possible and when not contrary to the national interest," he said.

FPC Approves Contracts

THE Federal Power Commission last month approved for an interim period ending December 19th rates for electric energy provided in 20-year contracts between the Bonneville Power Administration and five Pacific Northwest utility companies. The utilities are Portland General Electric Company, Pacific Power & Light Company, Mountain States Power Company, Washington Water Power Company, and Puget Sound Power & Light Company.

The contract states Bonneville is unable to supply the full firm purchased power requirements of the five utilities. They say the power to be made available to the companies during each month of the contracts will be determined by a supply schedule to be prepared each year by the Bonneville Administrator.

The rates and charges consist of Bonneville's rate schedule of \$17.50 per kilowatt year applied on a monthly basis to the allotted demand.

THE MARCH OF EVENTS

TVA Fiscal Reforms Snagged

FISCAL changes designed to put TVA on a "paying basis" were knocked out on point of order during passage by the House late last month of the Independent Offices Appropriation Bill, 1955. As reported by the House Appropriations Committee, the TVA section of the bill would have required TVA to pay interest on funds advanced by the Treasury and used to construct power facilities. The language of the provision stated that TVA must "pay each year, to miscellaneous receipts of the Treasury from its power revenues, an amount of interest equal to the amount of interest the Treasury must pay on moneys appropriated to the TVA for such purpose."

This proposal ran into trouble in the House Rules Committee where it became entangled with similar efforts to restore public housing funds. Caught in an unusual crosscurrent of left-right sentiment, points of order were allowed to be made against both (TVA and housing) provisions.

Another TVA reform would have restored rate-fixing control to TVA's power consumers. This likewise went out of the bill by point of order. The House Appropriations Committee favored such a "home rule" rate-making provision in the belief that it is not good policy for TVA to "interfere in the business of municipalities and local units of government." The interest proposal followed long-range recommendations by President Eisenhower in his Budget Message.

The action of the House does not foreclose further efforts to reform TVA's financial practices.

Sabotage Law Change Asked

ATTORNEY GENERAL Brownell recently recommended that Congress broaden the sabotage laws in two aspects: (1) the

definition of "war utilities" and "national defense utilities," as well as other definitions; (2) the broadening of the definition of sabotage to include destructive actions by means of radioactive, biological, or chemical agents.

On the first of these points, the position of most utility companies will not be changed. They were already included, along with gas, electric, water, and other utilities in the original provision of the United States Code relating to the crime of sabotage. The only thing the Attorney General asked for, which would be actually new under this heading, would be the inclusion of airfields, air lanes, and aviation facilities generally.

Utility-U. S. "Partnership" Proposed

A NEW type of "partnership" between the federal government and local agencies for building the 1,105,000-kilowatt John Day dam on the Columbia river between Oregon and Washington was proposed recently by the Portland General Electric Company.

The company wants local public and private power groups to advance the government about \$164,000,000 toward the \$320,000,000 project cost. Congress would be asked to appropriate an additional \$120,000,000, which local partners would pay back over a 50-year period under a contract for purchasing John Day power. Another \$36,000,000 figure would be a nonreimbursable federal expenditure allocated to navigation.

The government would build, own, and operate the dam. Rates would be sufficient to amortize the operating agency's bonds over a 35-year period and the government's investment in joint facilities in fifty years.

The project could be started in 1955 and would require six years to complete.

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Georgia

Transit Purchase

A NEW company which will have five public representatives on its 12-member board of directors recently announced plans to purchase the Atlanta Transit Company for \$5,000,000. The sale of Atlanta's street bus and railway system to Atlanta Transit System, Inc., is subject to approval of the state public service commission.

The attorney for the company said the sale would relieve the system of about

\$200,000 a year in federal income taxes by allowing depreciation deduction based on full value of the equipment. He said this sum could be used to replace equipment without increasing fares or reducing state and city taxes.

The attorney said he and one other stockholder of the old company, five stockholders of the new company, and five public representatives who own no stock in either, would be elected directors of the new company.

Illinois

Busses Roll Again

BUSSES were back on the streets of Galesburg recently after nine days of idleness in government-padlocked garages. Kewanee City Lines, under temporary authority from the state commerce com-

mission, restored the transit service.

The city of 32,000 was without bus service after Internal Revenue agents had locked up the busses on failure of the Galesburg Safety Route, Inc., to pay some \$14,000 in taxes.

Kentucky

Co-op Gets Bigger Generator

THE East Kentucky Rural Electric Co-operative Corporation recently received from the state public service commission authority to install a new 66,000-kilowatt generator at its power plant in Clark county.

The unit would be a substitute for a 40,000-kilowatt generator previously approved.

The co-op said in its application that the higher generating capacity was needed because of increased demands of its customers. The new unit is expected to cost \$8,490,000.

There are now two 20,000-kilowatt generators at the plant, located at Ford on the Kentucky river. These are to be placed

in operation early this summer. The proposed new unit would raise the plant's total capacity to 106,000 kilowatts.

The commission on March 25th formally approved the recent "armistice" between Kentucky Utilities Company and the East Kentucky Rural Electric Co-operative. Under the agreement the two power companies will combine their systems to distribute electric current to their customers.

Court Upholds Refund Order

REFUNDS totaling an estimated \$390,000 will go to northern Kentucky gas and electric customers of Union Light, Heat & Power Company under a court of appeals decision handed down recently.

THE MARCH OF EVENTS

The court upheld an order of the state public service commission. It had denied the company's attempt to put the increases into effect in March, 1952, after posting bond to assure refunds if its requested rate boosts later were denied.

Union proposed rate increases estimated by the commission as designed to bring in \$534,650 yearly from gas customers and \$392,000 from electric customers.

The state public service commission last month authorized the Union Light, Heat & Power Company to accept 1,000 new gas customers in the northern Kentucky area served by the firm. The utility had asked that emergency restrictions against taking new customers be eased.

The Frankfort Kentucky Natural Gas Company's rate increase case has been submitted to the commission for decision. The utility wants a \$59,000-a-year raise in rates for gas it retails in Frankfort, Versailles, and Midway.

Governor Vetoes Pipeline Bill

GOVERNOR Wetherby last month vetoed a bill to compel gas pipeline companies to furnish upon request service to any resident of a county through which the

line passes. The measure, House Bill 217, was introduced on February 4th by Representative Smith, Hindman Democrat. It was approved 78 to 1 by the house and 16 to 12 by the senate.

The bill would have required the person requesting gas service to build his own connecting line. Rates to be charged these customers would be fixed by the state public service commission.

Wetherby's veto message said he was concerned whether HB 217 was in the public interest. His conclusion that it was not was based on memoranda from the division of fire insurance and rates and the commission. Wetherby had asked both agencies to comment on the bill.

Bond Bill Passed

ABILL to permit publicly owned utilities in cities of the third class to issue revenue bonds to finance public improvements was given final passage by the state legislature last month and sent to the governor for signature.

Also given final state legislative approval was a bill to apply the law of condemnation to rights of way needed for underground storage of gas.

Louisiana

Severance Tax Cases Reversed

OIL and gas companies removing gas from part of the lands of the Barksdale Air Force base near Shreveport are liable for severance taxes imposed by the state collector of revenue, the state supreme court held last month.

The court, in the majority opinion, written by Associate Justice Harold A. Moise, reversed decrees by District Judge G. Caldwell Herget in Baton Rouge. The decree ordered the state to refund severance

taxes which had been paid by the Murphy Corporation, and by the Natural Gas & Oil Corporation, for gas captured on the airfield property.

Associate Justice Frank W. Hawthorne wrote a dissenting opinion in which he said the lands from which the gas was gathered and from which oil and gas were produced "are a part of the Barksdale Air Force base, a military air base owned by the United States . . . in which the state of Louisiana surrendered and granted the

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right of exclusive jurisdiction to the United States."

Justice Hawthorne said that since the United States is vested with the exclusive

jurisdiction, "the state is without power to levy and collect the taxes under the holding of the Supreme Court of the United States . . ."

Nebraska

Gas Contract Signed

A CONTRACT for the first natural gas network to provide power for irrigation was signed recently at Wilcox in a public ceremony.

Carroll Falk, who has headed the drive

for irrigation in the area, said the contract with the Kansas-Nebraska Natural Gas Company would be for "approximately eight miles of gas line extending from Axtell south to the Wilcox village limits. The potential for the area is 28 wells, Falk said.

Pennsylvania

Increased Gas Rates Filed

THE United Natural Gas Company on April 1st filed with the state public utility commission a new schedule of rates for natural gas service to homes, stores, institutions, and industries. The new schedule represents a 15 per cent increase in revenues derived from gas service which the company renders to more than 79,000 customers in 13 northwestern counties of the state. It would become effective for the

first full month of gas service rendered after May 31, 1954.

Two classifications of gas service customers are set up in the new rate schedule. The minimum monthly charge is increased 75 cents for customers who do not use gas for space heating and an additional 75 cents per month for those who do use gas for space heating. The greater cost in the minimum bill for the space-heating customer is to provide for his paying the costs created only by this type of service.

Texas

Natural Gas Tax Increase Approved

THE Texas house tax committee approved a bill to collect \$25,600,000 more annually on state natural gas, corporate franchise, and beer levies. The proposed bill makes the natural gas levy a production tax, rather than a "gathering" tax as originally suggested by Governor Shivers.

The production tax as proposed would be 9.06 per cent of the market value of the gas at the well. The present production tax on natural gas at the well is 5.72 per

cent of the market value. The increase would raise an estimated additional \$14,000,000 annually for the state.

The franchise tax, under the proposed measure, would be increased from the current \$1,000 of corporate assets to \$2 per \$1,000, hiking revenues from this source by an estimated \$8,600,000 a year.

The house revenue and taxation committee also approved another natural gas tax bill by an 8-to-7 vote. But it was understood that this bill was intended as a vehicle for a court test instead of a major revenue-raising measure at this time.



Progress of Regulation

Federal Water Power Act Did Not Abolish Water Rights Granted by State at Niagara Falls

THE United States Supreme Court has affirmed a decision of a federal court of appeals (100 PUR NS 350), holding that the Federal Water Power Act of 1920 did not abolish a licensee's private proprietary rights, existing under state law, to use navigable waters for power purposes. The licensee's water rights, according to the court, are rooted in state law, subject to the paramount rights of the state and nation.

Both the state of New York and the federal government had made limited assertions of their superior rights at Niagara Falls. The state had done so through its rental charges and the nation through a power project license issued by the Federal Power Commission. The court concluded that neither, however, had laid claim to such an exclusive right to the waters as would eliminate to the limited use which the licensee was making of them, the generation of power.

Dominant Servitude of Government

The water rights involved were usufructuary rights to use the water for the generation of power, as distinguished from claims to legal ownership of the water. The court concluded that the rights came within the scope of the government's dominant servitude, but that the government had not exercised its power to abolish

them. It recognized the dominant power of the federal government over navigable streams but said that the exercise of that servitude requires specific statutory authorization.

But, the court held, neither the act nor the license issued under it abolished any existing proprietary rights to use the waters involved. The act made no express assertion of the paramount right of the government to use the flow of any navigable stream to the exclusion of existing users. In fact, the court said, the plan of the act was one of reasonable regulation of the use of navigable waters, coupled with encouragement of their development as power projects by private parties.

Licensee's Amortization Reserve

The court also held that rental payments made for the use of the private water rights should be included in the licensee's amortization reserve required under § 10(d) of the Federal Power Act. The amortization reserve serves the function of reducing the licensee's net investment. That investment is the measure of the amount the United States must pay if it decides to recapture the licensee's plant under § 14 of the act. By allowing these water right payments as expenses for this purpose, the court increases the ultimate obligation of the United States.

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Dissenting Opinion

Justices Douglas, Black, and Minton dissented on the ground that by recognizing payments made to a state government, the federal government might have to buy something it already owns. They pointed out that the United States cannot be made

to pay directly or indirectly for the use of the waters of a navigable stream. If the licensee must pay for its water without being reimbursed by the United States, that is the price it must pay for its federal license, according to these judges. *Federal Power Commission v. Niagara Mohawk Power Corp.* March 15, 1954.



Book Cost Alone Constitutes Improper Rate Base

THE North Carolina supreme court remanded an order of the North Carolina commission granting the Southern Bell Telephone & Telegraph Company a rate increase. It found that the commission did not follow statutory requirements in valuing the company's property. The commission had adopted "book cost" or "cost less depreciation" as the proper rate base. The court said that by accepting such value as the rate base, the commission necessarily excluded present cost of replacement and all other factors from effective consideration.

The legislature, in using the term "value" in the statute prescribing rate-making standards, was not referring solely to the original or replacement cost or to the exchange or sales price it would command as used property on the market, however, the court said.

It believed that the legislature had reference to the value of the property actually in useful service.

Depreciation Allowance

The court also ruled that the commission should make allowance for depreciation on actual rather than replacement costs. It defined depreciation as the loss not restored by current maintenance which is due to all the factors causing the ultimate retirement of the property. The purpose of the allowance, the court said, is

to maintain the integrity of the investment to prevent a loss, not to assure a profit.

The court noted that the depreciation rate allowed by the government for income tax purposes is not necessarily the proper rate to be allowed for rate-making purposes. It conceded, however, that the problem could not be reduced to a mathematical certainty. It suggested that the commission promulgate a schedule of allowable rates of depreciation for rate-making purposes which would be fair to all concerned. However, the court said that was a question for the commission to decide, stating that the commission might prefer to deal with each case as it arises.

Return

The company serves in nineteen states and is part of a nation-wide system controlled by one parent corporation. It operates as one corporation. Consequently, the company's financial condition is affected by the rates charged, and income received, in every state in which it operates.

The company is in excellent financial condition, notwithstanding its net average return of only 4.8 per cent. North Carolina earnings amount to 5.4 per cent, indicating that the net return in some of the other states must be lower than the average. The court was not prepared to say that a return of 5.4 per cent was inadequate, leaving that for the commission to

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decide. It did say, however, that a substantial differential in the return in the various states served by the company might be considered some evidence that

the North Carolina rates are unjust to the local public. *North Carolina ex rel. Utilities Commission v. North Carolina et al.* January 29, 1954.



Coin-box Telephone Rates Increased

THE Kansas commission authorized the Southwestern Bell Telephone Company to increase rates for coin-box telephone service in the larger cities, but denied an increase for that service in the smaller communities. The company operates 163 exchanges in the state, and these are divided into several groupings, primarily by the number of stations in each city or community. The company's existing schedules are all predicated on these groupings, the rates, on the whole, being the same for all cities and communities within each group. The commission considered these groupings and concluded that it was fair and reasonable in the larger cities, where the revenue from the so-called pay stations is primarily transient, to increase the charge from 5 to 10 cents.

Service Connection and Move Charges

The company's attempt to increase its service connection and move charges was unsuccessful. These charges are nonrecurring. The commission recognized that the revenue received under existing rates for these services does not cover the cost

of material, supplies, and labor. At the same time, however, it noted that the increased rates proposed are somewhat higher than those in some other states. It believed that such charges should be more nearly compensatory to the cost of service. Therefore, it granted in part and denied in part this request for increased rates.

Capital Improvements

The company pointed out that it had spent large sums for capital improvements. The commission admitted that by these investments enlarged and improved portions of service were effected. However, it pointed out that the company has not fulfilled the demand for service in the state. It insisted that the company increase its efforts to supply this demand. In this connection the commission ordered semiannual reports showing the progress in the construction program and the extent to which the company has been able to increase service to those desiring service, and improve service to present customers. *Re Southwestern Bell Teleph. Co. Docket No. 46,248-U, December 16, 1953.*



Temporary Gas Rate Increase Absorbs Higher Supply Costs

A TEMPORARY gas rate increase was granted by the Wyoming commission to cover part of the increased cost of wholesale natural gas. The company contended that its sole objective was to be left in substantially the same position it was in prior to the wholesale increase. The

rider proposed by the company was not designed to improve net earnings or financial position.

Absorption of Increased Costs

The portion of the rate adjustment the company intended to absorb would result

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in a decrease in present earnings and rate of return. The Wyoming commission held that the company had made a *prima facie* showing that it could not absorb the total amount of the increased cost and continue to earn a reasonable rate of return on a net investment rate base.

Working Capital

Agreeing with the company that this was not a full-scale rate case, the commission commented, nevertheless, on the proposed working capital allowance as follows:

The company has included in its rate base figures, plant under construction and property held for future use. In determining the item of working capital used in its rate base figures, it has used therefor the sum of one-twelfth of its annual gas purchases and one-sixth of its annual operating expenses, less taxes and depreciation. In arriving at the income tax figures shown on its operating statements, it has used therefor the

sum of its monthly accruals for income tax purposes. We again reiterate that this is not a full-scale rate case; and we do not propose to determine herein the exact amount of what we consider legitimate components or elements of a rate base for the company and its respective departments. Nevertheless, we are of the opinion that the amount of working capital used by the company in its rate base figures is excessive, considering the amount of accrued taxes which the company does not have to remit for some time after such accruals are made; and the fact that plant under construction and property held for future use are included therein.

The increase was designed to cover approximately 71 per cent of the increased cost. About 29 per cent of the increase, the commission felt, could safely be absorbed by the company without jeopardizing its financial position. *Re Cheyenne Light, Fuel & P. Co. Docket No. 9248, February 19, 1954.*



Federal Power Commission Asserts Jurisdiction over Hydroelectric Project

A POWER company with five existing hydroelectric developments in an area proposed building a sixth. The new project contemplated using waters from a government dam. Consequently application was made to the Federal Power Commission to determine whether the development was subject to the licensing requirements of the Federal Power Act. The company had hitherto relied on departmental permits for the continued occupancy of the waters.

Commission Jurisdiction Contested

The company contended that the dam was a dual purpose dam for irrigation and

power uses, and that, because there could be no surplus water until both purposes were satisfied, the commission could not assert jurisdiction under the provisions of § 10(e) of the act. This section relates to annual charges for the use of government property.

Surplus water, commented the commission in rejecting the contention, means stored water over and above that needed for irrigation, and which would otherwise flow unused down the main channel of the stream. The company's argument was not in accord with the facts. An earlier agreement between the government and the company subordinated the company's

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water rights to the needs of the irrigators for a stated period and gave the United States "first use" of the water. The company was entitled to the remaining surplus.

The commission could assert jurisdiction since it had the responsibility of fixing reasonable annual charges for the use of such surplus water from the government dam.

License Requirements

Moreover, the commission continued, the project involved navigable waters of

the United States and was, therefore, subject to the licensing authority of the commission. The company could not rely upon departmental permits for continued occupancy.

The commission decided that a license should be issued conditionally. The company's agreement with the government adjusting the water rights between power and irrigation uses would have to be extended to cover the licensing period. *Re California Oregon Power Co. Opinion No. 266, Project No. 2082, Docket No. E-6390, January 28, 1954.*



Fisheries Successfully Object to Power Project License

THE United States court of appeals set aside an order of the Federal Power Commission authorizing an electric company to build a power project on an Oregon river. State fish and game commissions had appealed from the order on the ground that the project would block the upstream passage of anadromous fish (salmon and trout) to their spawning grounds. The state of Oregon also claimed that the commission lacked authority to grant the license since the company had failed to obtain a permit from the state hydroelectric commission and had not complied with state Conservation Laws.

The court held that the regulation of the river as it flows through the state is one of the powers of the state's sovereignty and includes regulatory powers as to fish in state waters. Noting that the United States government originally had control of waters within the public domain which had not been ceded to the states, and that it has paramount rights in navigable streams under the commerce clause of the United States Constitution, the court said that Congress has allowed the states within which waters flow to regulate them. Oregon has adopted the doctrine of bene-

ficial use and prior appropriation. This provides that state waters belong to the public and cannot be appropriated without the state's consent.

Permissive Licenses Proper

The court said that undoubtedly the commission has the legal right to give its approval to the project as a whole. It also conceded the commission's right to grant a permissive license for the construction of the proposed dam upon federal property. But, it pointed out, the commission issued no mere permissive license. It awarded a license purporting to grant the complete legal right to construct and operate the whole project. The court concluded that the commission exceeded its jurisdiction in that ownership of the dam site does not empower the United States government to use the waters of the river, either at the site or elsewhere, contrary to Oregon state law. In this connection it said:

It is true that the commission has gone a long way toward minimizing the harm which may result from the construction and operation of the project, but it has done so, not as a legal requirement, but as a commendable grace which the com-

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mission accords to the state. The fundamental principle, however, is not whether the project will cause large, small, or any damage. It is that Oregon has the right to regulate its own waters in its own chosen way.

Justice Healy dissented on the ground that state laws or objections cannot stand

as a legal bar to federal authorization of a power project which is within federal competence and which, in the judgment of the Federal Power Commission, will be in the public interest and will meet the standards specified in the Federal Power Act for a comprehensive power development. *State of Oregon v. Federal Power Commission*, No. 13,345, February 18, 1954.



Fraud Suit against Electric Company Dismissed

An industrial customer brought a fraud action in the United States district court against an electric company. The customer claimed that it had been induced to withdraw its objections to a rate increase by the company's promise to give it special rate treatment. The customer charged that the company obtained the increase but did not live up to its promise.

On appeal to the United States court of appeals, the action of the lower court in dismissing the complaint was upheld. The proper remedy, thought the court, would have been to apply to the commission for a rate revision and then appeal any adverse decision to the state courts.

The court saw no necessity for ruling on whether the civil action constituted a collateral attack upon a commission decision, but added:

It is, at least, under the guise of a

civil action for fraud, an attempt to bypass the commission, which should not be permitted. And there are many reasons justifying the refusal of a federal court to interfere, through the instant civil action, with the orderly functioning of the machinery set up by South Carolina for the control of rates to be charged by a public utility.

The court also noted that another reason for refusing to allow the suit involved the question of damages. The customer could not show that the commission would have denied the general electric rate increase if its objections had not been withdrawn.

The application was not uncontested since numerous other objectors had appeared at the hearing. *United Merchants & Manufacturers, Inc. v. South Carolina Electric & Gas Co.* 208 F2d 685.



Suspension of Certificates Contested on Constitutional Grounds

THE Illinois supreme court upheld the constitutionality of a state statute providing for suspension of motor carrier certificates when habitual violation of the maximum weight and load limits is established, in so far as it affects intrastate commerce.

The statute was held to be invalid,

however, in so far as it is applicable to interstate commerce. The court summarized its reasons for so holding:

A federal certificate of convenience and necessity to engage in interstate commerce does not, of course, imply immunity from the payment of taxes and

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other valid financial obligations. And so it may be that suspension for failure to meet obligations of that kind stands upon a different footing. But we do not see how an adequate national transportation system can be maintained if the comprehensive transportation network which it contemplates is to be subject to disruption by state suspension of operating rights for violation of load limits or other traffic regulations.

The carrier contended that a provision of the statute which made ten or more con-

victions for load violations within a specified time *prima facie* evidence of habitual violations was unconstitutional. Not so, decided the court. Merely because the statute did not take into account the number of miles driven by the respective violators did not make it invalid under the equal protection clause. Nor does the possibility of the carrier's being faced with the burden of defending against a succession of suspension proceedings involving identical violations contravene due process. *Hayes Freight Lines, Inc. v. Castle et al.* 117 NE2d 106.



Other Important Rulings

Market Value. Market value of securities, although not a primary measure of a rate base, thought the Pennsylvania superior court, is a relevant factor in the determination of fair value. *City of Philadelphia v. Pennsylvania Pub. Utility Commission*, No. 177, January 25, 1954.

Railroad Facilities. The Illinois supreme court held that the commission could not order a railroad to install facilities on freight train cabooses for the preservation of food and drinking water without first finding that such facilities were necessary for the health and safety of the railroad train crews. *Chicago, B. & O. R. v. Illinois Commerce Commission*, 116 NE2d 392.

Certificate Unnecessary. Neither a lessor of motor vehicle equipment nor a manufacturer who leases the trucks, held the Michigan supreme court, are carriers of passengers or property within the meaning of the Motor Carrier Act so as to require a permit where the trucks are used solely for deliveries of the products manufactured and all the drivers are employed

full time by the manufacturer and at the same rate. *Fry (Lloyd A.) Roofing Co. v. Michigan Pub. Service Commission* (1953) 61NW2d 783.

Commission's Reparation Authority. The New Jersey board, in dismissing the complaint of a home owner against a tract developer and a water company because of allegedly improper charges for laying water pipes, ruled that it had no authority to order reparation or refunds of money and that the rights of the parties under winterizing agreements providing for the laying of pipes were determinable by a court of law and not an administrative body. *Levitt v. Shore Hills Estates*, Docket No. 7288, February 17, 1954.

Denial of Temporary Certificate. A United States district court held that the commission did not act arbitrarily or capriciously in finally denying a carrier's application for temporary authority for service where the availability of the carrier's service to meet the transportation needs constituted a disputed question of fact and no formal hearing was manda-

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tory upon commission's finding that there was adequate available service. *Bowen Transports, Inc. v. United States et al.* 116 F Supp 115.

Grandfather Rights. The North Carolina supreme court ruled that the commission does not have authority to promulgate a rule affecting an irregular motor carrier operating under a certificate obtained by virtue of "grandfather rights" and then to interpret the rule in such a way as to limit the carrier's exercise of the rights which the grandfather statute was designed to preserve. *State ex rel. Utilities Commission v. Fox*, 79 SE2d 391.

Test Year Abnormalities. The New Hampshire commission commented that it

would not attempt to normalize every abnormal circumstance occurring during an electric company's test year since the effect would be to remove any margin of safety necessary to protect the company against sleet storms, floods, and other contingencies. *Re Public Service Co. of New Hampshire, D-R3279, Order No. 6354, January 29, 1954.*

Employees' Hospitalization. A commission order requiring a railroad to furnish hospital facilities to its employees is unconstitutional, held the Oklahoma supreme court, where the order does not relate to any public duty of the railroad but is confined to contractual relations between the railroad and its employees. *St. Louis-San Francisco R. Co. v. State*, 265 P2d 730.

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Public Utilities Reports (3d Series) are published in five bound volumes a year, with the P.U.R. Annual (Index). These reports contain the decisions of the state and federal regulatory commissions, as well as court decisions on appeal. The volumes are \$7.50 each; the Annual (Index) \$6.00. *Public Utilities Reports* also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

RE PUBLIC SERVICE COMPANY

COLORADO PUBLIC UTILITIES COMMISSION

Re Public Service Company of Colorado

Investigation and Suspension Docket No. 361, Decision No. 41845
January 7, 1954; rehearing denied January 8, 1954

APPPLICATION by gas company for authority to make emergency rate increase effective; granted.

Rates, § 48 — Commission jurisdiction — Service in home-rule city.

1. The commission is not deprived of jurisdiction over natural gas rates in a "home-rule" city, p. 67.

Rates, § 632 — Emergency increase — Natural gas.

2. A gas company was allowed an emergency rate increase where its supplier of natural gas had been allowed a substantial rate increase by the Federal Power Commission, p. 68.

Rates, § 143 — Emergency gas rate increase — Customer's burden.

3. The commission, in allowing an emergency gas rate increase because of sharply increased costs of purchased gas, will attempt to determine the amount of the increase which the company can safely absorb without jeopardizing its financial position and at the same time share with its gas customers a part of the increased costs, p. 71.

Return, § 101 — Gas company — Gas cost increase.

4. A 16½ per cent absorption of the increase in the cost of purchased gas was considered proper where the company's return after such absorption would be 6.33 per cent and where this percentage of the cost increase could be safely absorbed without jeopardizing the company's financial position or placing an undue burden on the customer, p. 71.

Reparation, § 17 — Increase in cost of purchased gas — Pendency of rate case.

5. A gas company which had been awarded an emergency rate increase to cover the increased cost of purchased gas, upon its supplier's obtaining a temporary rate increase by the Federal Power Commission, was directed to pass on to its customers any refund received when permanent rates for its supplier were determined, p. 71.

Discrimination, § 41 — Gas rate — Customers of combined utility.

6. It is not discriminatory or preferential for a gas and electric company to place a part of the burden of an increase in the cost of purchased gas upon gas customers, while the company absorbs the increased cost of gas purchased for use in an electric generating plant, where electric rates are not involved in the instant proceeding and where the company has indicated that upon the completion of studies as to the effect of the increased cost of gas on electric department expense, an electric rate increase application will be made, p. 72.

APPEARANCES: Lee, Bryans, Kelly Stansfield, Denver, and Ralph Sar-
and Stansfield, Denver, by Edgar A. gent, Jr., Denver, for Public Service

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Company of Colorado; Leonard M. Campbell, Denver, for Colorado Municipal League, the city of Fort Collins, and pro se; John M. Sayre, Boulder, for the city of Boulder, Colorado; John C. Banks, Denver, and Malcolm D. Crawford, Denver, for the city and county of Denver; William T. Secor, J. M. McNulty, and W. George Denny, Jr., Denver, for the commission.

By the COMMISSION: On December 28, 1953, Public Service Company of Colorado, hereinafter sometimes called the "company," by its vice president, W. D. Virtue, filed with the commission, pursuant to § 17 of the Public Utilities Act and the Rules of Practice and Procedure of the commission in such case made and provided, an emergency gas rate adjustment, being a temporary rider designated as Original Sheet No. 34 and Original Sheet No. 34A, as a part of its Tariff, Colo. PUC No. 3-Gas, to become effective on January 1, 1954, and at the same time petitioned the commission that it be permitted to put in force and effect said temporary gas rate adjustment as of said date affecting all its customers supplied with natural gas purchased by the company from Colorado Interstate Gas Company and Colorado-Wyoming Gas Company, both of which are interstate pipeline transmission companies, subject to the jurisdiction of the Federal Power Commission.

Authority for filing said temporary rider was granted by the commission by Authority No. 13788, of December 28, 1953.

By Decision No. 41801 in the instant matter, the effective date of the

proposed temporary rider was suspended, and the matters contained in said temporary rider were set for hearing before the commission at 9:30 o'clock A.M., December 31, 1953, in the hearing room of the commission, 330 State Office building, Denver, Colorado. Notice of said hearing was given to all parties in interest. Hearing was held in the instant matter on December 31, 1953, and evidence was heard in behalf of the company, and opportunity was given all those who appeared at the hearing for full cross-examination. At the conclusion of the hearing, the commission took the matter under advisement.

The company is an operating public utility, engaged primarily in the generation, purchase, transmission, distribution, and sale of electricity and in the purchase, distribution, and sale of natural gas in the state of Colorado. Its territory is divided into ten operating divisions throughout the state. Division offices, in addition to the main office in Denver, are located in the cities of Boulder, Brighton, Fort Collins, Grand Junction, Idaho Springs, Leadville, Alamosa, Salida, and Sterling, Colorado. District offices are located in certain cities, towns, and communities within the larger divisions. The company supplies electric service at retail in Denver and 144 other communities, and to rural, commercial, and industrial customers. It also supplies at wholesale all or part of the requirements of seven other utilities and three municipalities in or adjacent to its service area. The company supplies natural gas service in Denver and 37 other communities throughout the state. The principal

RE PUBLIC SERVICE COMPANY

pipeline suppliers of natural gas to the company are Colorado Interstate Gas Company and Colorado-Wyoming Gas Company. The company owns approximately 15 per cent of the common stock of Colorado Interstate, and owns all of the common stock of Colorado-Wyoming. In addition to purchasing gas for re-sale from said pipeline suppliers, the company also purchases substantial quantities of gas from said suppliers for use in its electric generating plants.

Public Service Company of Colorado is a public utility, as defined in the Public Utilities Act, and tariffs covering its natural gas rates for service throughout its system are on file with this commission and contained in the company's Tariff, Colo. PUC No. 3-Gas. The temporary gas rate adjustment which the company proposes to place into effect in the instant matter is filed as a temporary rider to the company's tariff, Colo. PUC No. 3-Gas, now on file with the commission.

[1] At the outset of the hearing in the instant matter, Mr. John M. Sayre, representing the city of Boulder, moved that the commission dismiss the petition filed in the matter now being heard as to the city of Boulder upon the basis that it is a "home-rule" city, and that the Public Utilities Commission has no jurisdiction as to the regulation of rates of "home-rule" cities. Mr. Sayre also offered Boulder's Exhibit No. 1, being a copy of the franchise granted to Public Service Company, together with proof of publication of said franchise. The commission, at the hearing, took the motion under advisement.

Leonard M. Campbell appeared at the hearing on behalf of the Colorado

Municipal League, but his appearance for the league did not include any appearance in connection with the "home-rule" or franchise question that might apply to member cities in the league. He also appeared as an individual ratepayer in Denver on his own behalf, and he further specifically appeared for the "home-rule" city of Fort Collins, Colorado. Subsequent to the hearing herein, Mr. Campbell filed written protest on behalf of the city of Fort Collins, and for himself as an individual, attached to which were "late-filed" Exhibits A and B. He also filed a written protest on behalf of the Colorado Municipal League. The protest on behalf of the Municipal League was to the effect that the proposed gas rate increase was excessive, and also discriminatory, as between gas and electric customers. His prayer was for the commission to dismiss the application to deny the proposed rate increase, or in the event an increase be granted, the order be conditioned upon a refund to the customers of such part of the increase as the company is able to absorb after a proper determination thereof is made at a full rate hearing and the review of all the pertinent facts.

The protest on behalf of the city of Fort Collins and for himself as an individual ratepayer in the city of Denver pertains to the question of rights under the franchises and the jurisdiction of this commission over the "home-rule" cities of Fort Collins and Denver. His prayer in this petition was to the effect that the application be dismissed, or denied, as it applied to customers in the "home-rule" cities of Denver and Fort Collins, Colorado.

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Since we reserved the ruling on Mr. Sayre's motion at the hearing, we will consider both the motions of Mr. Sayre and Mr. Campbell at this time, as they pertain to the jurisdiction of this commission. We appreciate the citations given by counsel for our consideration, and we have reviewed the same, together with all the evidence adduced at the hearing, and all of the allegations—both oral and written—as submitted, and we are of the opinion that the motions to dismiss or deny for lack of jurisdiction should be denied.

[2] From the evidence at the hearing, it is apparent that the emergency gas rate adjustment sought by the company herein has been precipitated by the increase in rates for gas furnished to the company for re-sale by its principal suppliers, Colorado Interstate Gas Company and Colorado-Wyoming Gas Company, which rates, under orders of the Federal Power Commission, are to become effective January 1, 1954.

On September 2, 1953, in FPC Docket No. G-2260, Colorado Interstate Gas Company tendered to the Federal Power Commission for filing, pursuant to § 4 of the Natural Gas Act, 15 USCA § 717c, a proposed system-wide increase in its rates and charges for all gas sold for re-sale subject to the jurisdiction of the Federal Power Commission, including natural gas furnished for re-sale to the Public Service Company. Simultaneously with said filing, Colorado Interstate requested that if the Federal Power Commission suspended such rates, that the suspension be for a period no longer than until January 1, 1954. By order issued September

28, 1953, the Federal Power Commission set said matter for hearing on January 12, 1954, and, at the same time, suspended the effective date of the proposed changes in rates and charges until March 3, 1954, and in such order, denied Colorado Interstate's request to limit the period of suspension to January 1, 1954.

This commission, the company, and the city and county of Denver have all intervened in this matter involving the rates and charges of the Colorado Interstate Gas Company before the Federal Power Commission in FPC Docket No. G-2260, the hearing on which has been set in Washington, D. C., on January 12, 1954.

The Federal Power Commission, on December 22, 1953, in FPC Docket No. G-2260, amended its order issued September 28, 1953, by shortening the original suspension of the proposed increase in the rates and charges of Colorado Interstate from March 3, 1954, to January 1, 1954. In said amending order, the Federal Power Commission finds that such action on its part is necessary and appropriate, and in the public interest, and recites that the Colorado Interstate will place in operation, on or about January 1, 1954, additional facilities which will enable it to receive additional volumes of natural gas under recently executed gas purchase contracts calling for increased gas purchase costs. The Federal Power Commission in said order further takes official notice that the Kansas State Corporation Commission has increased the minimum field price in the Kansas Hugoton field, effective January 1, 1954, from 8 cents to 11 cents per Mcf, and that Colorado Interstate makes extensive purchase

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of gas in the Kansas Hugoton Gas field. By telegram dated December 22, 1953, Colorado Interstate Gas Company advised applicant that the proposed increased rates and charges contained in its Application FPC Docket No. G-2260 would become effective under bond on January 1, 1954.

On September 2, 1953, in FPC Docket No. G-2261, Colorado-Wyoming Gas Company, which supplies natural gas to the company for distribution in various northern Colorado communities, and which purchases its gas requirements from Colorado Interstate, tendered to the Federal Power Commission for filing a proposed increase in its rates and charges for gas sold for re-sale subject to the jurisdiction of the Federal Power Commission, including natural gas furnished for re-sale to the company. By order issued September 28, 1953, the matter of the proposed increase in the rates and charges of Colorado-Wyoming was set down for hearing before the Federal Power Commission on January 20, 1954, and the effective date of said proposed changes in rates and charges was suspended until March 3, 1954. By letter dated December 22, 1953, Colorado-Wyoming tendered for filing with the Federal Power Commission its Third Revised Sheet No. 4 to its FPC Tariff Original Volume No. 1, which contained revised proposed rates and charges negotiated with the staff of the Federal Power Commission in settlement of its rate proceedings at FPC Docket No. G-2261. In said revised filing, Colorado-Wyoming stated that the proposed rates were predicated upon the proposed increased rates of Colorado In-

terstate to be effective on January 1, 1954, and if the Federal Power Commission, in FPC Docket No. 2260, after hearing, should direct Colorado Interstate to sell gas to Colorado-Wyoming at a rate lower than the proposed increased rates to be effective January 1, 1954, Colorado-Wyoming would file new schedules with the Federal Power Commission to reflect such lower rate, and would refund to its customers, which include Public Service Company, the difference between the rate reflected on its Third Revised Sheet No. 4 and the lower rate prescribed by the Federal Power Commission. On December 29, 1953, the Federal Power Commission accepted for filing Colorado-Wyoming's Third Revised Sheet No. 4, to be effective January 1, 1954, in settlement of the rate proceedings at FPC Docket No. G-2261, upon the terms set forth in Colorado-Wyoming's letter to the Federal Power Commission, dated December 22, 1953, and by letter dated December 29, 1953, Colorado-Wyoming advised the company that the new increased rates reflected on its Third Revised Sheet No. 4 which had been accepted by the Federal Power Commission would become effective January 1, 1954.

The impact on the company of the increase in the rates and charges for gas furnished to the company by Colorado-Wyoming Gas Company and Colorado Interstate Gas Company, effective January 1, 1954, is that during the year 1954, the increase in the cost of gas purchased by Public Service Company of Colorado from said suppliers will amount to \$2,097,000.

W. D. Virtue, vice president and treasurer of the company, testified with

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respect to various computations and figures taken from the books of account of the company for the twelve-months' period ended November 30, 1953. He testified that the total property, plant, and equipment of the company, as of November 30, 1953, was \$172,814,824. Relating this amount, less the book reserve for depreciation at November 30, 1953, in the amount of \$26,944,925 to the net operating revenue of the company for the twelve-months' period ended November 30, 1953, in the amount of \$8,634,448, a return of 5.92 per cent would be shown. With an allowance added of \$3,543,000 for materials and supplies, and \$3,740,000 for working capital to the property, plant, and equipment, less the reserve for depreciation, a return of 5.64 per cent is indicated at November 30, 1953.

With respect to the gas department of the company, the total property, plant, and equipment of the gas department, less the book reserve for depreciation at November 30, 1953, was \$34,898,080, and with an allowance for working capital and materials and supplies in the amount of \$2,650,000, when related to the net operating revenue of the gas department for the twelve-months' period ended November 30, 1953, shows a return of 6.82 per cent.

Mr. Virtue also testified with respect to computations made as to the gas operating results estimated by the company for the year 1954. He testified that the total property, plant, and equipment for the year 1954 is estimated to amount to \$43,750,800 for the gas department, and that this amount, less the depreciation reserve, would amount to \$37,804,000. He

estimated the net operating revenue for the year 1954 in the amount of \$2,743,845, which amount, when related to the net property, plant, and equipment of the gas department, with an allowance added for materials and supplies and working capital of \$2,941,000, shows a return of 6.73 per cent.

These figures as to the gas operating results for the year 1954 do not contain the estimated increase cost of gas, which amount is estimated to be, as heretofore stated, \$2,097,000. Assuming the increased cost of gas is borne entirely by the company during the year 1954, the return on the gas department, when related to net plant plus allowance for materials and supplies, is estimated to be 4.31 per cent.

The \$2,097,000 increased cost of purchased gas to the company, which the company seeks to offset by the increase in its revenues resulting from the temporary rate adjustment, includes only the cost of gas purchased by the company for re-sale, and does not include the increased cost of gas purchased by the company from Colorado Interstate for use in its electric generating plants. The cost of such gas has been increased from 10½ cents to 16 cents, and in the year 1954, this increased cost will be approximately \$700,000, of which the company expects to recover 30 per cent by application of the company's electric fuel adjustment clauses. To offset this increased operating expense of the company's electric department, the company has not proposed any adjustment in its electric rates, but seeks by the instant application to recover only the increased cost of gas purchased by the company for re-sale.

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The matter of the increased cost to the company of gas purchased from Colorado Interstate for use in its generating plants is the subject of a jurisdictional dispute between Colorado Interstate and the Federal Power Commission. This matter has been set for oral argument before the Federal Power Commission on January 12, 1954, in Washington, D. C., prior to the general rate hearing in Docket No. G-2260.

Viewing the evidence as a whole adduced at the hearing by the company in support of its application for emergency relief, there are various factors which the commission deems to be significant. First and foremost, the action of the Federal Power Commission in allowing Colorado Interstate to put into effect its increased rates under bond on January 1, 1954, was without prior notice to the company, and has presented the company with a special unavoidable problem of serious consequences. In its order of September 28, 1953, in FPC Docket No. 2260, the Federal Power Commission had specifically denied Colorado Interstate's request to shorten the suspension period to January 1, 1954, and had suspended Colorado Interstate's proposed new rates until March 3,

1954. Anticipating a substantial increase in its cost of purchased gas from Colorado Interstate and likewise from Colorado-Wyoming to become effective March 3, 1954, the company had undertaken a review of its entire rate structure, including both gas and electric rates. These studies are not today completed, but the company has stated that it expects to complete these studies in the near future.

[3-5] Secondly, it appears to this commission that the company has made a prima facie showing that neither the company as a whole nor the gas department alone can absorb the total increase in the cost of gas purchased for re-sale by the company amounting to \$2,097,000.

We have set out in the table below the various rates of return all calculated using Property, Plant and Equipment based on Original Cost, with Materials and Supplies added, less Reserve for Depreciation, for both the total company and the gas department only, showing 100 per cent pass-on of the increase to the customer, 100 per cent absorption of the increase by the company, and an absorption of 16½ per cent of the increase by the company, based on twelve months ending November 30, 1953.

TWELVE MONTHS ENDING NOVEMBER 30, 1953

Items	Total Company	Gas Depart- ment Only
Property Plant and Equipment	\$172,814,824	\$40,225,805
Materials and Supplies	3,543,000	873,000
Working Capital	3,740,000	1,777,000
Gross Property Plant and Equipment	\$180,097,824	\$42,875,805
Depreciation Reserve	\$26,944,925	\$5,327,725
Net Property Plant and Equipment	\$153,152,899	\$37,548,080

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Net Operating Income, 100% Pass-on	\$8,634,448	\$2,561,247
Rate of Return, 100% Pass-on	5.64%	6.82%
Net Operating Income, 100% Absorption	\$7,648,858	\$1,575,657
Rate of Return, 100% Absorption	4.99%	4.20%
Net Operating Income, 16 $\frac{1}{3}$ % Absorption	\$8,470,150	\$2,396,949
Rate of Return, 16 $\frac{1}{3}$ % Absorption	5.53%	6.38%

A similar tabulation based on the estimated twelve months' operations for the year 1954 is as follows:

TWELVE MONTHS ENDING DECEMBER 31, 1954 (Estimated)

Items	Total Company	Gas Department Only
Property, Plant and Equipment	\$192,840,000	\$43,750,800
Materials and Supplies	4,142,000	962,000
Working Capital	4,120,000	1,979,000
Gross Property Plant and Equipment	\$201,102,000	\$46,691,800
Depreciation Reserve	\$32,909,000	\$5,946,800
Net Property Plant and Equipment	\$168,193,000	\$40,745,000
Net Operating Income, 100% Pass-on	\$8,372,730	\$2,743,845
Rate of Return, 100% Pass-on	4.98%	6.73%
Net Operating Income, 100% Absorption	\$7,387,140	\$1,758,255
Rate of Return, 100% Absorption	4.39%	4.31%
Net Operating Income, 16 $\frac{1}{3}$ % Absorption	\$8,208,432	\$2,579,547
Rate of Return, 16 $\frac{1}{3}$ % Absorption	4.88%	6.33%

In setting forth in the above tabulation the results of the 16 $\frac{1}{3}$ per cent absorption of the increase of cost of gas to the company as estimated for 1954, which results in a 6.33 per cent rate of return, we have applied what we believe to be the amount the company can safely absorb without jeopardizing its financial position with respect to its gas operations, and at the same time share with its gas customers a part of the increased cost of gas so that the customers in turn will not bear an undue burden.

In arriving at our conclusions herein as to what amount should be absorbed by the company and what amount passed on to the customer, we have considered certain basic elements, both as to rate of return and as to elements that could be considered legitimate components of a rate base, without, however, going into a full-scale

rate hearing to determine the exact amount of these elements. We feel justified in this instance in using this procedure because of the very nature of the problem confronting us, with the time element involved, the emergency nature of the temporary increase, and the fact that the motivating cause for the increase is beyond the direct control of either the company or the commission. The answer herein, as we have determined it, was reached after consideration of all the elements involved, and having in mind that the end result to be fair to all concerned must lie in a zone of reasonableness.

[6] Protestants contended at the hearing that it was discriminatory and preferential to place the entire burden of the proposed increased cost of gas purchased for re-sale upon the gas customers of the company, while the

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company is absorbing the increased cost of gas purchased from Colorado Interstate for use in its generating plants. The increased cost of boiler gas can only affect the company's electric rates, which are not involved in this proceeding. However, the company has stated that as soon as it completes its studies it expects to come before this commission with an application to increase its electric rates. Based on the showing made in the instant proceeding by the company, the company's present return on its gas department is higher than the return to the company as a whole, and it is higher than the return to the company on the electric department. Nevertheless, this commission does not believe that the gas rate adjustment which we will order herein will result in either preferential or discriminatory treatment, but will be fair and equitable to said gas customers.

We have been assured by the company that any refund due its customers as a result of the final settlement of the rate case in FPC Docket 2260 will be passed on to said customers. So that there will be no misunderstanding, we will order that the Public Service Company make a refund of the proportionate share due to its customers. However, we will retain jurisdiction of this matter to make such further order, or orders, as we deem necessary to fully carry out and accomplish the refund in a manner to meet with our final approval.

In accordance with the evidence before us, and based on the considerations heretofore enumerated, we believe that the proposed temporary rider designated as "Original Sheet No. 34 and Original Sheet No. 34A," being

a part of the Public Service Company Tariff, Colorado PUC No. 3-Gas, as filed with the commission on December 28, 1953, is unjust, unreasonable, discriminatory, and preferential, and it should be permanently suspended and not permitted to become effective. We further believe that rates that would retain to the Public Service Company 16 $\frac{2}{3}$ per cent of the estimated increase of \$2,097,000 for the year 1954 would be fair and equitable, and that the company should be permitted to file a temporary rider to its present tariff to reflect this absorption.

The commission finds:

That the above statement be incorporated as a part of these findings, by reference.

That the commission has jurisdiction of the Public Service Company of Colorado, and of the tariffs of said company involved in the instant matter.

That the temporary rider designated as "Original Sheet No. 34 and Original Sheet No. 34A" to said company's tariff, Colo. PUC No. 3-Gas, filed with the commission on December 28, 1953, proposing to increase the gas rates effective January 1, 1954, is unjust, unreasonable, discriminatory, and preferential, and should be permanently suspended and not permitted to become effective.

That the company should be permitted to file a new temporary rider to its Tariff, Colo. PUC No. 3-Gas designed so that the company will absorb 16 $\frac{2}{3}$ per cent of the estimated increase to it of the cost of gas based on the 1954 estimates.

That such rate when filed, should be permitted to become effective on

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January 9, 1954, upon notice to this commission and the general public by not less than one day's filing and posting in the manner prescribed by law and the rules and regulations of this commission.

That the temporary rider as set forth above reflecting an absorption of $16\frac{2}{3}$ per cent by the company of the proposed gas rate increase is fair, just, reasonable, and nondiscriminatory.

That the motions of John M. Sayre and Leonard M. Campbell to dismiss the instant matter or to deny it for lack of jurisdiction should be denied.

That the Public Service Company of Colorado should be ordered to pass on to its customers their proportionate share of any refund due to said customers as a result of the final settlement of the gas rates in FPC Docket No. 2260 and FPC Docket No. 2261.

That this commission should retain jurisdiction of this matter to make such further order, or orders, as may be necessary in the premises.

ORDER

The commission *orders*:

That the temporary rider designated as "Original Sheet No. 34 and Original Sheet No. 34A" to Public Service Company's tariff, Colo. PUC No. 3-Gas, filed with the commission on December 28, 1953, proposing to increase the gas rates effective January

1, 1954, should be, and it hereby is, permanently suspended.

That the company be, and it hereby is, authorized to file a new temporary rider to its tariff, Colo. PUC No. 3-Gas, designed so that the company will absorb $16\frac{2}{3}$ per cent of the estimated increase to it of the cost of gas based on the 1954 estimates.

That the temporary rider as outlined above, and as herein authorized, shall become effective on the 9th day of January, 1954, upon notice to this commission and the general public by not less than one day's filing and posting in the manner prescribed by law and the rules and regulations of this commission.

That the motions of John M. Sayre and Leonard M. Campbell to dismiss the instant matter or to deny it for lack of jurisdiction be, and they hereby are, denied.

That Public Service Company of Colorado be, and it hereby is, ordered to pass on to its customers their proportionate share of any refund due to said customers as a result of the final settlement of the gas rates in FPC Docket No. 2260 and FPC Docket No. 2261, in the manner to be later approved by the commission.

That this commission shall retain jurisdiction of this matter to make such further order, or orders, as may be necessary in the premises.

RE MOUNTAIN STATES TELEPH. & TELEG. CO.

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Re Mountain States Telephone &
Telegraph Company

Case No. 3939
December 29, 1953

APPPLICATION by telephone company for authority to increase rates; modified increase granted.

Return, § 26 — Cost of capital — Debt ratio of telephone company.

1. A debt ratio of about one-third of total capital obligations of a telephone company, for the purpose of determining cost of capital, would unduly burden the company's ratepayers where, owing to the corporate tax structure and existing market conditions, a wide divergence between the cost of equity and debt capital exists, p. 79.

Return, § 26 — Cost of capital — Debt ratio of telephone company.

2. A debt ratio of 40 per cent, for the purpose of determining cost of capital, was considered within the realm of safety for a telephone company, p. 79.

Return, § 26 — Cost of capital — Interest on debt.

3. A contention that the interest on a telephone company's present debt should be calculated at 3.25 per cent, instead of the actual average of 2.82 per cent, in arriving at an over-all cost of capital figure is untenable where the presently outstanding debentures represent a contractual obligation and there is no evidence that they will be replaced by another issue which might have a different interest requirement, p. 81.

Return, § 111 — Telephone company — Interest and dividend requirements.

4. A rate of return of approximately 6 per cent on a net investment rate base was held to be fair and reasonable for a telephone company in view of interest requirements on a proper debt ratio and cost of equity capital determined on the basis of dividend-price ratios and earnings-price ratios, p. 82.

Depreciation, § 14 — Basis for allowance — Original cost.

5. Annual depreciation should be based on original cost of depreciable plant when the Uniform System of Accounts provides for such a basis and present tax laws provide for the use of the same basis for tax purposes, p. 86.

Return, § 35 — Allowance for attrition — Investment at high prices.

6. Attrition (diminishing the rate of return when investment in plant is made at high prices after a test period) should be recognized in determining the revenue requirements of a telephone company, p. 86.

Valuation, § 224 — Plant under construction.

7. Plant under construction should not be included in the rate base, p. 90.

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Valuation, § 288 — Cash working capital.

8. Cash working capital was not allowed as part of the rate base of a telephone company, p. 90.

Return, § 111 — Projected rate base — Telephone company.

9. A telephone company for which a return of 6 per cent was deemed reasonable was allowed 6.5 per cent to enable the company to earn a reasonable return in the future after completion of an extensive construction program currently in progress, p. 90.

Expenses, § 114 — Federal income tax — Telephone company.

10. Federal income taxes should be treated as an expense in arriving at the net operating earnings of a telephone company, p. 91.

Dividends, § 5 — Retention of earnings — Surplus.

Statement that a continuing corporate utility should not, in the interest of sound financial practice, pay out all of its earnings in dividends since the retention of part of the earnings in the business provides protection for future dividends and unforeseen contingencies, as well as capital, p. 84.

APPEARANCES: S. N. Cornwall, for complainant; Peter M. Lowe, Deputy Attorney General, for public service commission; Paul Thatcher for Ogden City; L. E. Elggren and N. A. Jensen, for Consumers' Welfare League; E. L. Wright, for Himself.

By the COMMISSION: The above-entitled matter, filed in the nature of a complaint, is an outgrowth of the proceedings in Case No. 3833. In the latter-mentioned case by order dated April 10, 1953, 99 PUR NS 1, the commission denied the application of The Mountain States Telephone and Telegraph Company for authority to increase its Utah intrastate telephone rates.

In the proceeding under consideration The Mountain States Telephone and Telegraph Company alleges that its present rates and charges are unfair, unreasonable, and inadequate. The prayer of the complaint requests the commission to determine the dollar amount of net earnings which will produce a fair, reasonable, and adequate

rate of return, and that the complainant be ordered to file a schedule of rates that will produce the net earnings found to be fair, reasonable, and adequate.

The complainant alleges that the present rates and charges for Utah intrastate telephone service are unfair, unreasonable, and inadequate for the following reasons:

(a) The net earnings are insufficient to provide a fair return on the investment in property devoted to intrastate service.

(b) Because of the depressed level of earnings investors will not put their savings to work in the expansion of complainant's plant.

(c) Due to the inflation experienced during the post-World War II period operating expenses and taxes have increased constantly, and the costs for placement of new plant and replacement of old plant are substantially higher than the costs at which similar items were placed in service originally.

(d) Since February 1, 1953, there

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has been a substantial increase in the cost of capital, particularly debt capital, resulting in part from a change in the policy of the United States government relating to the financing of the public debt.

After due and legal notice, hearing on the complaint commenced on August 17, 1953, on which date the complainant presented its direct case. A recess then was taken to permit interested parties to review the evidence submitted and to prepare cross-examination and further evidence. The hearing reconvened on November 9, 1953, and the introduction of evidence was completed the following day.

In view of the importance of the case the commission determined it was advisable to employ a firm of independent certified public accountants to review the records and data of the complainant that are pertinent to a determination of the issues. The firm of Lincoln G. Kelly and Company of Salt Lake City was retained for this purpose. Exhibits and oral testimony were presented by one of the partners of this firm, Mr. Lincoln S. Kelly.

At the request of counsel for the complainant the entire record in Case No. 3833, *supra*, was made a part of the record in Case No. 3939. Based upon the consolidated record the commission makes the following report containing its findings and conclusions.

1. The Mountain States Telephone and Telegraph Company, hereinafter referred to either as "the complainant" or "the company" is a corporation of the state of Colorado. It conducts a general telephone business in the states of Arizona, Colorado, Idaho, Mon-

tana, New Mexico, Utah, Wyoming, and El Paso county, Texas. The complainant is a part of the Bell System and the American Telephone and Telegraph Company (American Company) owns approximately 86 per cent of its common stock. At June 30, 1953, the complainant was rendering service to 220,372 telephones in Utah through 60 exchanges.

2. The accounts and records of the complainant are kept in accordance with the Uniform System of Accounts for Telephone Companies prescribed by the Federal Communications Commission, which system of accounts has been adopted by this commission. Under its accounting procedures records are kept on a statewide basis showing investment in plant, revenues, and expenses for each state in which the company operates. In turn a separation is made of the total state figures to show interstate and intrastate operations. The procedures followed in arriving at the interstate and intrastate breakdown are based upon the Separations Manual prepared by the NARUC-FCC Special Cooperative Committee on Telephone Regulatory Problems, dated October 1947, as modified and amended by the so-called Charleston Plan. The Utah intrastate results developed through the separations procedures cover the area of operations with which we are primarily concerned.

3. The latest figures in the record cover the twelve months ended June 30, 1953. The actual results of the Utah intrastate operations for this period, as shown by the evidence are as follows:

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Operating revenues	\$14,376,661
Operating expenses	11,145,638
Taxes, other than income taxes ..	871,240
Taxes, state income	22,638
Taxes, federal income	988,598
Total operating deductions	\$13,028,114
Net operating income	\$1,348,547
Miscellaneous income charges	27,728
Net operating earnings (excluding interest charged construction) ..	\$1,320,819

The net investment rate base for the twelve months ended June 30, 1953, determined in conformity with the method employed by the commission in previous proceedings, is as follows:

Telephone plant in service	\$36,775,326
Property held for future telephone use	33,989
Materials and supplies	749,692
	\$37,559,007
Less: Allocated depreciation reserve	9,012,727
Rate base	\$28,546,280

The actual net operating earnings of \$1,320,819 related to a rate base of \$28,546,280 indicates a rate of return of 4.63 per cent for the twelve months.

Adjustments to the operating figures shown above have been made to reflect the full effect on earnings for the test period of changes in the level of certain revenue and expense items. These changes took place either during the period covered by the figures or shortly thereafter and have a bearing on the rate of return. These adjust-

ments as applied to the net operating earnings figure of \$1,320,819 are described below.

Deduct:	
August, 1953, wage increase	\$285,000
Change in connecting company compensation	4,100
Pension accrual rate increase	16,600
	\$305,700
Add:	
Directory revenue increase	\$38,800
Local tax recovery ¹	125,200
Western Electric Company price reductions	800
	\$164,800
Net deduction	\$140,900
Less: effect of above adjustments on federal and state taxes	74,899
Net adjustment (deduction)	\$66,001

After applying the net adjustment of \$66,001 the net operating earnings figure becomes \$1,254,818. On a rate base of \$28,546,280 the adjusted net operating earnings produce a rate of return of 4.40 per cent.

4. The underlying factors which must be considered by a commission in determining the allowable earnings of a public utility have been stated by the Supreme Court of the United States on several occasions. In the Hope Case² the court summarized these factors in the following language:

"From the investor or company point of view it is important that there

¹ An order issued by the commission on May 5, 1952, in I. & S. Docket No. 83, authorized the complainant to increase its rates in those municipalities which impose a municipal franchise or license tax upon the company, in an amount sufficient to recover such impositions from subscribers within those municipalities. 94 PUR NS 105. Affirmed on August 29, 1953, by the supreme court of Utah, — Utah —, 260 P2d 754. At the closing date of the hearing in the present proceeding the complainant had not started to bill its customers pursuant to the authority

2 PUR 3d

granted. The treatment accorded this item above has the effect of increasing the net operating earnings to the amount they would have been had these impositions been billed and collected.

² Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 51 PUR NS 193, 88 L ed 333, 64 S Ct 281. See also Bluefield Water Works & Improv. Co. v. West Virginia Pub. Service Commission, 262 US 679, PUR1923D 11, 67 L ed 1176, 43 S Ct 675, and United R. & Electric Co. v. West, 280 US 234, PUR1930A 225, 74 L ed 390, 50 S Ct 123.

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be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital." (320 US at p. 603, 51 PUR NS at pp. 200, 201.)

The court said further:

"Under the statutory standard of 'just and reasonable' it is the result reached, not the method employed, which is controlling. . . . It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the act is at an end." (320 US at p. 602, 51 PUR NS at p. 200.)

The record in Case No. 3833, *supra*, contains voluminous testimony on the subject of cost of capital and rate of return. Evidence of this character was offered for the complainant by Mr. Paul E. Remington, a vice president of the complainant, and by Mr. Jackson Martindell, president of the American Institute of Management, and a financial consultant and economic adviser. Dr. Lionel W. Thatcher, professor of public utilities and transportation at the University of Wisconsin, testified on the same subject as a commission staff witness. The evidence of the complainant was augmented in Case No. 3939 by the testimony of Mr. Orval W. Adams and Mr. Wendell M. Smoot, Salt Lake City bankers.

[1, 2] 5. In order to determine the cost of capital to the complainant it is necessary to give consideration to the capital structure upon which such cost is predicated.

The conventional public utility capital structure consists of part capital stock (including retained earnings in the surplus account) and part debt. The capital stock of the Bell System Companies consists entirely of common stock with the exception of one company which has some preferred stock outstanding. At September 30, 1952, the borrowed capital of the Bell System consolidated amounted to 42.4 per cent of the total invested capital. The comparable figure at June 30, 1953, was 38.99 per cent.

In the electric light and power industry the capital structure on the average consists of approximately 45 to 50 per cent debt, 15 per cent preferred stock, and 35 to 40 per cent common stock. Thus the fixed charge capital (debt and preferred stock) of the electric companies accounts for 60 to 65 per cent of the total invested capital.

Under the usual capital structure the cost of equity capital is higher than the cost of fixed charge capital, and the proportional part of each type of capital to the total makes a difference in the over-all earnings requirements.

Historically, the debt ratio of the complainant has shown a rather consistent increase. The ratio has grown from 3.25 per cent in 1919 to 30.22 per cent in 1929. It dropped to 19.32 per cent in 1930 but had climbed to 40.97 per cent by 1940. During the decade of the 1940's it exceeded 40 per cent each year with a high of 53.24 per cent in 1947. At the end of each

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of the years 1950, 1951, and 1952 the debt ratio was 38.80, 39.65, and 37.36 per cent, respectively.

At June 30, 1953, the actual ratio of the total debt to total capital obligations of the complainant was 29.40 per cent, consisting of \$60,000,000 of funded debt and \$23,900,000 in the form of advances from the American Company.

Mr. Remington contends that the debt of the company should not exceed one-third of the total capital obligations. He undertook to demonstrate that the telephone industry does not have the same stability of revenues or income as that enjoyed by the electric industry. He made a comparison showing the total main telephones in the Bell System, the electric customers of the electric light and power industry, and total toll messages of the Bell System, covering the years 1925 to 1951. These data indicate a greater decline in number of main telephones during the depression years of the 30's than in the number of electric customers, and a more pronounced increase in main telephones than in electric customers during the 40's. Toll messages follow somewhat the same curve as main stations during the 30's but show a more pronounced increase during the 1940 decade. Figures showing kilowatt-hour sales of electricity were not included in the exhibit. Such data probably would afford a better basis of comparison with the volume of toll messages than that employed by Mr. Remington. His evidence also shows that the per cent of operating revenues taken by labor in the telephone industry is considerably greater than in the electric industry, and that there is less of the revenue dollar left for telephone

investors than for investors in the electric industry.

Mr. Remington concludes from these comparisons that the investment risk in the telephone business is greater than in the electric business, and for this reason the telephone industry must have a smaller proportion of its capital in the form of debt.

Mr. Martindell's evidence as to an appropriate debt ratio for the complainant is similar to that of Mr. Remington. His conclusion is that the debt should not exceed 30 to 35 per cent of total capital.

Dr. Thatcher, on the other hand, expressed the opinion that a debt ratio of one-third unreasonably increases the over-all cost of capital resulting in excessive capital costs to the consumers of the service. It was his further opinion that a 40 per cent debt ratio would be a desirable objective for the complainant, but that during the present period of rapid plant expansion it would be reasonable if the debt ratio were around 45 to 50 per cent. In arriving at this opinion Dr. Thatcher stressed the fact that interest rates have declined continuously since 1920, but no comparable decline in dividend rates has occurred, and the further fact that during the 20's the income tax rates were but a fraction of the present rates. In view of these drastic changes in interest and tax rates it was Dr. Thatcher's view that the low debt ratios that obtained during most of the 20's and the early 30's should not necessarily be determinative of what the debt ratio should be today. If the past is to be a guide to the future on this matter Dr. Thatcher felt that greater weight should be attached to the actual experience of complainant

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during the postwar period. The average debt ratio during these years was 44.2 per cent. The comparable figure for the Bell System was 46.2 per cent.

Interest on debt is a deductible item of expense in determining income tax liability. Dividends paid on common stock are not deductible. The present federal corporate income tax rate is 52 per cent. Simple arithmetic will demonstrate the difference in the cost to the users of telephone service of the two types of capital. As noted below Mr. Remington feels that the company should pay a dividend of \$8 a share and that not more than 70 per cent of the earnings should be paid in dividends. This would require earnings of \$11.43 a share after taxes. In order to have such earnings the company would need \$23.81 before taxes. This would be the annual cost on \$100 of common stock. If we assume that the current cost of debt capital is 3.25 per cent, the interest cost on \$100 of borrowed money would be \$3.25, as compared with \$23.81 for a comparable amount of equity capital.

The management of a public utility is obligated to consider the welfare of its customers as well as its stockholders. With the wide divergence between the cost of equity and debt capital brought about by the present tax structure and market condition it appears that the ratepayers would be unduly burdened under the debt ratio proposed by the company.

It is self-evident that during periods of depressed business conditions a company (or an individual, for that matter) with no debt or a moderate amount of debt is in a safer position than one with a high debt. Somewhere between the point of no debt

and extremely high debt is an area of reasonable safety. We would not recommend that any public utility should become indebted to the point that its financial soundness is threatened or weakened. The determination of the financial policies of the complainant rests with its officers. For a regulatory commission to attempt to substitute its judgment in such matters may be dangerous. In view of all the testimony on the subject of debt ratio, however, we find that a ratio of 40 per cent is entirely within the realm of safety for the complainant at this time.

6. The determination of the cost of debt capital to the complainant presents no difficulties. Its outstanding long-term debt consists of \$35,000,000 principal amount of 2½ per cent debentures due May 15, 1986, and \$25,000,000 principal amount of 3½ per cent debentures due April 1, 1978. The annual interest requirements on the two series amount to \$1,700,000. After giving effect to the annual release of premium on this debt in the amount of \$9,790 the net annual cost is \$1,690,210 or 2.82 per cent of the face amount of the debt. Both Mr. Martindell and Dr. Thatcher expressed the opinion that new debt capital could be obtained at approximately 3.25 per cent. American Company charges 3.25 per cent on advances to the complainant.

In its complaint the company alleged that the cost of debt capital had increased substantially since February 1, 1953. No evidence was offered in support of this allegation.

[3] In arriving at an over-all current cost of capital Mr. Martindell used an interest factor of 3.25 per cent as the annual cost of the entire debt com-

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ponent of his hypothetical capital structure of one-third debt and two-thirds equity. In our opinion this position is untenable. The presently outstanding debentures represent a contractual obligation. There is no evidence that they are to be replaced by another issue which might have an interest requirement different from the cost of the present debentures. Accordingly Mr. Martindell's contention that the interest on the present debt should be calculated at 3.25 per cent instead of the actual average of 2.82 per cent is rejected.

[4] 7. The cost to the company of equity capital presents a problem much more difficult of solution. The opinion of the company's witnesses is at considerable variance from that of Dr. Thatcher.

As a background for our discussion of this matter a reference to the past dividend record of the company may be helpful. The common stock has a par value of \$100 a share. The evidence shows that a dividend of \$7 a share was paid each year from 1919 to 1925. In 1926 the dividend was \$7.25 a share which was increased to \$8 a share in 1927. The \$8 dividend prevailed for all intervening years through 1937. During the years 1938 to 1942 the dividend was \$7 a share. It was reduced to \$6 a share in 1943, at which level it has been maintained except in the years 1947 and 1948 when it was \$4.75 and \$5.75, respectively.

During the years 1948 to 1952, inclusive, five new issues of the company's common stock were offered to its stockholders. The American Company subscribed for its pro rata share of each issue but the public (minority) shareholders subscribed for an average

of only 26.6 per cent of their share. The complainant is one of three among the operating subsidiaries of the American Company which has public stockholders. All of the common stock of the other telephone subsidiaries is owned by the American Company.

Mr. Remington ascribes the failure of the public stockholders to take their quota of the stock to a loss of confidence in the company's stock, at least from the standpoint of supporting additional investment. This may be true. In this connection, however, the question can be raised as to the effect on the stock-buying habits of investors in telephone securities of the availability of investments in the American Company. The latter named company has paid a dividend of \$9 a share each year commencing with 1922. American Company stock, in a sense, has taken on the characteristics of a fixed income security. Likewise, an investor in American Company stock has the entire Bell System back of his investment. It would seem, therefore, that stock in the American Company is more desirable to the average investor than the stock of one of the subsidiaries.

Mr. Remington concludes that in order to attract new equity capital a dividend of \$8 a share is necessary, and that the pay-out ratio should not exceed 70 per cent. By "pay-out ratio" is meant the percentage of earnings available for stockholders actually paid in dividends. He maintains that the earned surplus of the company is abnormally low and must be built up substantially. Under his proposal 30 per cent of the company's earnings would be retained in surplus. A pay-

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out ratio of 70 per cent was reached largely on the basis of the pay-out ratio of Moody's 24 public utilities, which over a 6-year period averaged 70.7 per cent.

The company's stock has a market price of approximately \$100 a share. In Mr. Remington's opinion the offering price of a new stock issue should be at least 20 per cent below the market price in order for the issue to be successful, and since new stock must be offered at not less than \$100 a share (the par value) the market price between issues should be not less than \$125, in view of all the circumstances which might occur. A dividend of \$8 would increase the market price to this level, according to Mr. Remington's analysis of the problem.

Mr. Martindell determined the cost of equity capital through an analysis of 58 offers of electric common stocks of \$5,000,000 and more over the period 1949 to July, 1952. By comparing the latest published earnings prior to the offer with the net price received by the issuing company an "equity cost ratio" was developed. For the 58 companies this ratio averaged 10.0 per cent. Mr. Martindell then eliminated from the 58 companies (a), all issues which were not underwritten (b), all issues where the offering price was not set at the latest date before the offer, and (c), all issues where the offering price was not approved by a regulatory body. There were 14 issues covered by these eliminations. Another 11 issues were eliminated in which cases rate increases had been authorized and reported in the prospectuses but were not included

in the latest reported earnings figure. On the remaining 33 issues the average equity cost ratio was 10.3 per cent. Mr. Martindell concludes from these data that the current cost of equity capital to the complainant is approximately 10 per cent on a common stock equity base of 65 to 70 per cent.

Dr. Thatcher's studies on the subject of cost of equity capital included data relating to the complainant, the American Company, five Bell System telephone operating companies,³ and Moody's 24 public utilities. Several essential relationships were developed in these studies, the first two of which are the dividends-price ratio and the earnings-price ratio. The first mentioned ratio represents the yield received by the investor at the market price of the stock, while the earnings-price ratio relates earnings to market price. Data covering the years 1929 to 1952 (1929 to 1951 on earnings-price ratios) for the companies used by Dr. Thatcher show average ratios for that period as follows:

	Dividends- Price Ratio	Earnings- Price Ratio
Mountain States Teleph. & Teleg. Co.	5.75%	5.56%
American Teleph. & Teleg. Co.	5.96	6.64
Five Bell System tele- phone companies	5.59	5.88
Moody's 24 utilities ..	5.65	6.69

Similar dividends-price ratios for the one year 1952 are somewhat higher for the complainant and the five telephone companies, but lower for American Company and Moody's 24 utilities. The average earnings-price ratios for the six years 1946 through 1951 are

³ New England Teleph. & Teleg. Co., Mountain States Teleph. & Teleg. Co., Pacific Teleph. & Teleg. Co., Southern New England Teleph. Co., and Cincinnati & Suburban Bell

Teleph. Co. The American Company owns a controlling interest in the stocks of the first three companies but less than one-third of the capital stock of the other two.

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higher (with the exception of American Company) than for the period shown above, being 5.86, 6.53, 6.66, and 7.68 per cent, respectively, for the same companies.

Dr. Thatcher concludes from his study that under existing market conditions a dividends-price ratio of 6.0 per cent and an earnings-price ratio of 7.5 per cent are sufficient to attract capital. There is some indication that investors are buying utility stocks largely on the basis of dividends, and for this reason Dr. Thatcher believes more reliance should be placed upon the dividends-price ratio than on the earnings-price ratio. The use of a dividends-price ratio developed from the above data would not be proper, however, without a determination of a fair pay-out ratio. This brings us to Dr. Thatcher's third essential relationship.

Sound business practice dictates that a continuing corporation should not pay out all of its earnings in dividends. The retention of part of the earnings in the business provides protection for future dividends and for unforeseen contingencies. Retained earnings also provide capital to the company. The data submitted by Dr. Thatcher show that over the period 1920 to 1951 the complainant has paid in dividends approximately 95 per cent of its net increment in surplus (net income for each year adjusted for direct surplus charges or credits). Comparable information for the American Company shows that during the years 1928 to 1951 the dividends paid by that company averaged 96.40 per cent of its net increment in surplus. Data as to direct surplus charges or credits were not readily available for the

American Company for years prior to 1928. However, over the entire period of 1920 to 1951, the American Company's dividends averaged 88.39 per cent of its current earnings. The electric industry (all Class A and Class B companies) with a substantially higher debt ratio has had an average dividend pay-out (on both preferred and common stock) of 92.1 per cent of the net increment in surplus over the years 1937 to 1951.

Dr. Thatcher is of the opinion that the company's earnings should be sufficient to enable it to increase its surplus at a more rapid rate than in recent years. It is his conclusion, therefore, that a pay-out ratio of 80 per cent to be applied to his dividends-price ratio would be reasonable in determining the over-all cost of capital to the company.

When a large issue of stock is placed on the market there is a tendency for the price to become depressed below what might be called the theoretical price of the stock. This effect is commonly referred to as "pressure." A corporation which sells stock also incurs certain necessary expenses in connection with the issue. Factual studies conducted or reviewed by Dr. Thatcher indicate that the combined effect of pressure and corporate financing of recent Bell System stock issues and of 13 electric offers through rights in 1951 did not exceed 6 per cent. He recommends, however, an allowance of 10 per cent for these factors in arriving at the reasonable cost of equity capital.

Dr. Thatcher's conclusion is that 8.35 per cent represents a reasonable cost of equity capital to the complainant. This figure is the result of apply-

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ing a pay-out ratio of 80 per cent to a dividends-price ratio of 6 per cent to obtain a hypothetical earnings-price ratio of 7.5 per cent. An allowance of 10 per cent for pressure and corporate financing increases the 7.5 per cent figure to 8.33 which was rounded to 8.35 per cent. This opinion of the cost of equity capital is predicated upon a hypothetical capital structure of 40 per cent debt and 60 per cent equity.

As a further test of the reasonableness of 8.35 per cent as the cost of equity capital Dr. Thatcher presented information on the conversion of debentures of American Company. During the period from 1948 to September, 1952, the American Company increased its equity capital through conversion of debentures by \$1,712,728,000. Reduced to a share basis this represents a price of \$136.81 per share of stock, and a yield of 6.58 per cent based upon a \$9 dividend. The earnings-price ratio on a hypothetical pay-out of 80 per cent would be 8.23, which figure is slightly lower than the 8.35 adopted by the witness.

As a final step Dr. Thatcher gave the proper weighting of the cost of each type of capital on a hypothetical capital structure of 40 per cent debt and 60 per cent equity to arrive at a recommended rate of return. His final conclusion is that a rate of return in the range of 6 to 6.25 per cent on a net investment rate base would be reasonable.

Mr. Kelly submitted an exhibit designed to show the percentage of earnings that would be retained at various dividend rates, based upon a 40 per cent debt ratio. This exhibit shows that at a rate of return of 6 per cent and a dividend of \$6.50 the retained

earnings would be approximately 24 per cent. On the basis of a \$7 dividend 18 per cent of earnings would be retained. At the same dividend rates and a rate of return of 6.25 per cent the percentage of earnings retained would be approximately 27 and 22, respectively.

After full consideration of all the evidence on the subject of rate of return the commission finds that if the company should earn a rate of return of approximately 6 per cent on a net investment rate base (heretofore described) the earnings would be fair and reasonable.

8. The company's evidence on the subject of earnings requirements emphasized the impact of the inflation that has occurred since World War II upon investments in telephone equity securities. This problem received careful consideration in our decision in Case No. 3833, dated April 10, 1953, 99 PUR NS 1, in which we concluded our discussion of the matter with the following statements:

"Under the theory advanced the applicant would have this commission provide protection against inflation for a particular class of people, the telephone equity holder. Mr. Martindell points to certain classes, particularly the farmers and labor, which, by reason of acts of the Congress have been accorded some protection from the inflationary trend. Inflation is a national problem and a serious one. We do not think the solution of the problem is in the creation of further classes. Certainly those who buy telephone service are entitled to the same basic consideration as any other group. Nor do we believe it was the intention of the legislature in writing the public utili-

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ties act to empower or require this commission to take action that would make utility stockholders free from the impact of the economic forces at work in this country." (99 PUR NS at p. 8.)

We are fully aware of the seriousness of the inflation experienced in recent years. One need not be expertly trained in economics to understand its impact. And we have been conscious of the problem in our consideration of the present case. While we have not followed the recommendations of company witnesses to give specific recognition to certain aspects of inflation we would like to point out some facts that otherwise might escape attention.

[5] The company's witnesses urged the commission to make allowance in the annual depreciation charge to reflect the "consumption of real capital devoted to the business which is not covered by conventional depreciation charges based on recorded dollar cost." The Uniform System of Accounts provides that depreciation expense shall be calculated on original cost of the depreciable plant. Present tax laws also provide for the use of the same basis for tax purposes. We do not feel justified in departing from cost as a basis for depreciation charges under existing tax laws. The evidence indicates that approximately two-thirds of the net book value of telephone plant in service in Utah at this time represents dollars expended for plant installed since 1945. It follows that a substantial part of the annual depreciation expense is calculated on invested dollars of postwar purchasing power.

The current charges to the operating expense accounts of the company are

2 PUR 3d

measured by dollars of present-day purchasing power. It will be seen at a later point in the discussion that all known increases in the level of expenses such as wages have been taken into account in arriving at the increased revenues to be authorized.

[6] 9. The complainant has been before this commission on four previous occasions since the close of World War II for upward revisions of its Utah rates. Increased rates were granted in three of these proceedings. The evidence shows, however, that during the intervening years the company has not earned the rate of return found by the commission to be fair and reasonable in those cases. The company attributes its failure to earn the allowable return to the fact that in these former proceedings the commission predicated its findings on a past test period at a time when large amounts of money were being invested in plant at the prevailing high prices. The process of diminution of the rate of return is referred to by the company as "attrition."

The basic concept of attrition is that as additional plant is added at higher cost than the average of the then existing plant, earnings will decline, because it is assumed that the revenue will be no greater from the new units added and increased depreciation and ad valorem taxes based on the increased unit investment will reduce net earnings.

During the period January 1, 1946, to June 30, 1953, the company expended in excess of \$35,000,000 in the construction of telephone plant in the state of Utah. The net additions to plant (gross additions less plant retired) amounted to approximately \$26,000,-

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000. The gross construction program in 1953 will amount to some \$8,000,000 and the estimate for 1954 is \$10,000,000.

The huge expansion program in recent years is the result of an unprecedented demand for telephone service. This demand is evidenced by the fact that the number of telephones in service in Utah increased from 81,974 at December 31, 1940, to 220,372 at June 30, 1953. From January 1, 1946, to June 30, 1953, there was a net gain of 105,977 telephones, an increase of 92.6 per cent.

It is interesting to note the effect of the construction expenditures on the average investment per telephone. An exhibit submitted by Mr. Kelly shows that at December 31, 1940, the average investment (Account 100.1, Telephone Plant in Service) per telephone in the state of Utah was \$200.59. This average declined each year to a low of \$162.81 in 1946, but in subsequent years it has shown a continuous increase. At December 31, 1952, it stood at \$200.27, practically the same figure as at December 31, 1940. The average had increased further to \$206.64 at June 30, 1953. The average investment per telephone for the company as a whole is higher than in Utah. At June 30, 1953, the company average was \$244.99 compared with a figure of \$208.70 at December 31, 1940. During the intervening years the pattern followed the same general trend as that described for Utah.

By relating the annual increase in number of telephones to the net increase in telephone plant in service some idea may be gained as to the effect on construction costs of the post-war prices. Data for the state of Utah

show that the average investment per telephone added during the past five years was as follows:

1948	\$218.31
1949	208.13
1950	264.77
1951	254.66
1952	401.35
5-year average	264.90

All of the figures discussed above relate to total Utah investment in telephone plant. Under the separation procedures roughly 86 per cent of the total state investment is assigned to Utah intrastate.

In its application in Case No. 3833, filed in August, 1952, the company represented that for each new telephone added in Utah approximately \$290 in additional intrastate investment was required, as contrasted with an average investment of \$165 for all telephones in service. In Case No. 3939 the company claimed that currently the figure was \$362, compared with an average of \$169 for existing telephones.

It is apparent that the type of plant built during a given year has a pronounced effect upon the average investment for each telephone added in that year. For example, if in one year the major construction covers central office buildings or toll circuits the average cost of each telephone would be high. In another year if the plant constructed consisted primarily of facilities that would permit the installation of a greater number of telephone instruments, such as exchange cable and additions to central office equipment, the average investment added for each telephone gained would be lower.

The evidence on the subject of attri-

UTAH PUBLIC SERVICE COMMISSION

tion warrants a recognition of this factor in the determination of the revenue requirements of the company. There is some difficulty, however, in measuring accurately its effect on the earnings of the company and in finding an appropriate method to give recognition to it. A series of comparisons presented by the company of the rate of return earned in four overlapping twelve months' periods from January 1, 1951, to June 30, 1953, indicates that the average annual decline in rate of return due to attrition was .60 per cent.

In our computations below of the revenue requirements we will make use of an average investment per telephone on a basis followed in the Lincoln G. Kelly Company study in giving recognition to the effects of attrition. In the light of all the available data we believe the figure of \$290 referred to above is a reasonable amount to use for this purpose.

10. Comparisons of certain operating figures covering the Utah business of the company deserve comment. An exhibit presented by Mr. Kelly shows a comparison of revenues and expenses for the twelve months' period ended June 30, 1952, and June 30, 1953, for Utah intrastate, Utah interstate, and total Utah operations. Intrastate revenues increased 9 per cent in the fiscal year ended June 30, 1953, over the previous fiscal year. Total intrastate operating expenses increased 12 per cent. General salaries and expenses show the most pronounced increase, the figure being in excess of 30 per cent. In view of the fact that 65 per cent of the telephones in Utah are served by dial equipment it seems reasonable to assume that traffic expenses

(which consist largely of operators' wages) assigned to intrastate operations on a usage basis would fluctuate in a close proportion to the volume of intrastate toll business. Traffic expenses, however, were higher by 14 per cent even though toll service revenues increased only 6 per cent. Relief and pensions expense shows an increase of 17 per cent. In all functional groups of expense the increase, percentage-wise, exceeded the increase in revenues. Net operating revenues decreased 1.5 per cent. By comparison interstate toll service revenues allocated to Utah under the Division of Revenue Contracts with the American Company increased approximately 19 per cent while traffic expenses assigned to the interstate business increased 14 per cent.

A comparison of operating results for the six months ended December 31, 1952, with the six months ended June 30, 1953, produces even more pronounced differences. Total intrastate operating revenues increased 1.5 per cent compared with an increase of 1.9 per cent in interstate revenues. Total intrastate operating expenses increased 3.9 per cent while interstate expenses declined 4.6 per cent. The effect on net operating revenues was a decrease of 6 per cent in intrastate but an increase of 29 per cent in interstate business.

The company's primary explanation of the six months' comparisons referred to above is that seasonal variations account for the apparent irregularities. Even so, there seems to be some justification for questioning the reasonableness of the intrastate allocations of expenses under the separation procedures prescribed in the manual.

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At this point it seems appropriate to refer to the results of operations over the past five years. The following figures show the ratio of net operating income to average net telephone plant for Utah intrastate and total company operations, and also the average for the associated companies of the Bell System:

Year	Utah Intrastate	Total Company	Associated Companies
1948	5.1%	5.7%	4.7%
1949	6.1	4.9	4.8
1950	5.6	5.4	6.2
1951	5.1	4.6	5.8
1952	5.7	5.3	6.0
Average of Annual Ratios	5.5	5.2	5.5

While the above ratios standing alone are not determinative of whether the returns earned were adequate, still they do indicate that over the 5-year period the Utah intrastate operations have compared very favorably with the total company and with the Bell System.

In our findings in Case No. 3833 *supra*, 99 PUR NS at p. 11, we commented as follows: "The evidence in this case shows that the gross revenue of the applicant compares very well with the gross revenue of other Bell System Companies. However, Mountain States Company has been unable to 'carry down' an adequate amount of the total revenue 'below the line' to meet fixed charges and a comparable return to equity capital. In other words, although the applicant's total revenue is good, it does not carry down as large a percentage of that revenue to apply to fixed charges and return on equity as do some of the other Bell System Companies."

Since then the situation has become more aggravated. There has been a

serious deterioration in the company's earnings from Utah intrastate operations in 1953. Expenses have mounted at an alarming rate. In explanation of this situation, the company attributes increased wages and expenses incident to the construction program as fundamental factors. It is evident that other factors, particularly organizational in nature, also contributed to this condition. General and administrative expense increases have contributed substantially to the decrease in earnings particularly since the reorganization affecting officers and supervisory personnel in the latter part of 1952.

The commission is of the opinion that reduction in expenses per service unit should and must be made. A continuation of the expense trend in 1953 in relation to prior years would require prohibitive rates to maintain reasonable earnings in the future.

11. The evidence is conclusive that the company's Utah intrastate earnings should be improved. Our method of determining the amount of increased revenues needed will be somewhat of a departure from past practice. In view of the fact, however, that increases granted in past proceedings have failed to produce the rate of return found to be reasonable we think the method adopted is fair. As a starting point the operating results for the twelve months ended June 30, 1953, will be employed.

As stated at an earlier point in this report the company's net operating earnings for the twelve months ended June 30, 1953, amounted to \$1,320,819. This figure was reduced by \$66,001 to give effect to the current level of operations, including a wage

UTAH PUBLIC SERVICE COMMISSION

increase in August, 1953, and the other adjustments noted. Thus we have an adjusted net operating earnings figure of \$1,254,818 for the period.

[7, 8] The company urged the commission to include telephone plant under construction and an allowance for cash working capital in the rate base. In the past we have excluded these two elements from the rate base. We believe the result reached below meets the statutory standard of "just and reasonable"⁴ without the inclusion of these two items in the rate base. It may be noted, also, that the rate base which excludes plant under construction and cash working capital exceeds the capital obligations assignable to Utah intrastate operations. The average rate base for the twelve months ended with June, 1953, is \$28,546,280, and the rate of return earned during those twelve months was 4.40 per cent, based upon the adjusted earnings of \$1,254,818.

[9] We found above that a rate of return of approximately 6 per cent on a net investment rate base calculated in accordance with our usual practice will produce fair and reasonable earnings. The problem is to set rates that will permit the company to earn such a return. Rates are made for the future. On the basis of past experience it would appear that if we base our determination of the necessary improvement in revenues strictly on the results of operations and rate base covering a past period, the required return will not be earned in the future if the extensive construction program currently in progress and projected for the next year is carried out in accordance with

the company's plan as submitted at the hearing. The large expenditures for new plant form a vital part of the whole problem.

In view of the announced construction program we have concluded to compute the return at 6.50 per cent, and project the rate base and operating earnings forward to December 31, 1953. By such procedure we believe the company should be able to earn the rate of return (approximately 6 per cent) hereinabove found to be just and reasonable. It is to be strictly understood that in using a rate of 6.50 per cent at this time we do not find that the company is entitled to earnings of that magnitude.

A rate of return of 6.50 per cent applied to a rate base of \$28,546,280 results in earnings of \$1,855,508. Compared with the adjusted earnings of \$1,254,818 for the twelve months ended June 30, 1953, the deficiency in earnings amounts to \$600,690.

The evidence indicates that the Utah intrastate rate base will be \$32,545,000 at December 31, 1953. That date is but days away. This represents an increase of \$3,998,720 over the average rate base for the fiscal year ended June 30, 1953. The average number of telephones in service during the twelve months ended with June, 1953, was 214,438. It is estimated that the number at December 31, 1953, will be 226,500, an increase of 12,062 over our base period.

The subject of the higher investment per telephone added at today's prices was discussed above. We there found that \$290 was a reasonable figure to use as the average cost of plant associated with each new telephone, compared with an average of \$165 for

⁴ Hope Case, *supra*, 320 US 591, 602, 88 L ed 333, 51 PUR NS 193, 200, 64 S Ct 281.

RE MOUNTAIN STATES TELEPH. & TELEG. CO.

existing telephones. The difference of \$125 multiplied by the gain in telephones of 12,062 produces a figure of \$1,507,750. This amount represents the aggregate additional cost of revenue-producing facilities added over the average cost of units in service during the test period and therefore requires separate provision in the calculation of revenue requirements. A return of 6.50 per cent on this amount equals \$98,004.

On the balance of the estimated increase in the rate base to December 31, 1953, of \$2,490,970 (\$3,998,720 less \$1,507,750), it is assumed that the company will earn the test period rate of return of 4.4 per cent, or \$109,603. At 6.50 per cent the return on \$2,490,970 would be \$161,913, hence the deficiency in return on this part of the rate base is \$52,310.

The figures up to this point do not give effect to the depreciation expense and ad valorem taxes on the increased investment of \$1,507,750. This added expense less the associated income taxes amounts to \$33,020.⁵

The results of the above steps may be summarized as follows:

Deficiency in return on rate base for 12 months ended June 30, 1953	\$600,690
Return on increased investment of \$1,507,750	98,004
Deficiency in return on investment of \$2,490,970	52,310
Depreciation and ad valorem taxes (net) on increased investment of \$1,507,750	33,020
Total deficiency in return	\$784,024

⁵ The computation as applied to the increased investment is as follows:

Depreciation on increased investment	3.13%
Ad valorem taxes	1.49

	4.62
Less income taxes at 52.70%	2.43

Depreciation and ad valorem taxes (net after income taxes)	2.19%
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[10] The impact of Federal income taxes on necessary increases in the rates of public utilities has been emphasized on numerous occasions by this commission. Federal income taxes must be treated as an expense in arriving at net operating earnings. At the present tax rate of 52 per cent⁶ the company must collect in excess of \$2 from its customers to improve its earnings by one dollar. A small part of the increased revenues must go to pay certain other taxes such as the Utah franchise tax and also the fees due the American Company under the License Contract. After payment of the added taxes and fees the company can retain only \$46.70 of each \$100 of increased revenues.

The application of the factor of .4670 to the deficiency in return of \$784,024 shown above produces the required increase in gross revenues. The figure is \$1,678,852.

Conclusions

As long as there is an unsatisfied demand for telephone service it is clear that the company has a statutory duty to provide the plant to furnish such service. Money must be secured from investors to pay for the added plant, and the company is entitled to a fair return on funds so invested. We believe the first concern of a telephone subscriber is that the service must be first class. Adequate plant is a prerequisite to good service. As we conceive our primary duty it is to take the steps necessary to permit a utility to render the service reasonably required by its customers at the lowest rates

⁶ The present tax law provides that the rate shall be reduced to 47 per cent for taxable years beginning after March 31, 1954.

UTAH PUBLIC SERVICE COMMISSION

consistent with the financial health of the company which provides the service. This contemplates that the management of the utility will be prudent and that the interests of the customers will receive the same consideration as the stockholders. It would not be in the public interest if the agencies providing our public utility services were not kept in a sound condition financially.

The company's construction program is designed, in part, to provide service to those who have been unable to secure a telephone because of inadequate facilities, and to enable existing subscribers to obtain a better grade of service. The program also contemplates the conversion of certain exchanges from manual to dial operation. The two largest areas included

in this category are Provo-Orem-Springville and Murray. In arriving at the increased revenues to be authorized in the present proceeding the necessity for the company to proceed with the construction program as outlined in the hearing has been a dominant factor in our deliberations. It will be expected, therefore, that the company will proceed with the program according to schedule.

Based upon the foregoing the commission concludes that the company should be authorized to increase its Utah intrastate telephone rates to a level that will provide it with not in excess of \$1,678,852 in additional gross revenue when related to the estimated number of telephones at December 31, 1953.

RE NORTHWESTERN BELL TELEPH. CO.

NORTH DAKOTA PUBLIC SERVICE COMMISSION

Re Northwestern Bell Telephone
Company

Case No. 5092
December 30, 1953

APPPLICATION by telephone company for authority to increase rates; application granted.

Apportionment, § 7 — Telephone separations — Interstate and intrastate operations.

1. A telephone company's allocation of plant, equipment, and costs between intrastate and interstate operations, based on the separations procedure set up by the NARUC and the Federal Communications Commission, was found to be reasonable, p. 95.

Valuation, § 299.1 — Working capital — Tax accruals.

2. Tax accruals were excluded from the working capital allowance of a telephone company, p. 95.

Expenses, § 114 — Federal income tax — Consolidated return with parent company — Telephone company.

3. A telephone company's income tax was adjusted to reflect savings realized by filing a consolidated return with a parent company, p. 95.

Expenses, § 114 — Income tax — Proposed reduction.

4. A proposed reduction in federal income taxes was disregarded as being extremely unlikely in determining a telephone company's operating expense, p. 95.

Return, § 111 — Telephone company.

5. Telephone rates yielding a return of less than $4\frac{1}{2}$ per cent were considered inadequate to yield a fair return on money prudently invested, p. 95.

(CART, Commissioner, dissents in part.)

By the COMMISSION: Northwestern Bell Telephone Company, hereinafter called the "company," filed a complaint with this commission on the 18th day of September, 1953, alleging that its present rates and charges for telephone service furnished by it within the state of North Dakota are insufficient, unjust, and unreasonable and requesting this commission to

establish in lieu thereof just and reasonable rates and charges for such service. The complaint was docketed as Case No. 5092. Hearing on the complaint was set for October 27, 1953, in the hearing rooms of the state capitol at Bismarck, North Dakota, and on September 22, 1953, notices of the hearing were mailed by the commission to the mayor or village

NORTH DAKOTA PUBLIC SERVICE COMMISSION

clerk of every community served by the company and to the newspapers generally throughout the state. Pursuant to such notice, hearing was held on October 27 and 28, 1953, at which time the following appearances were made:

William R. Pearce, Bismarck, and Harris A. Poley, Omaha, Nebraska, appearing for the Northwestern Bell Telephone Company; R. W. Wheeler, Bismarck, appearing as Commerce Counsel for the North Dakota Public Service Commission; Donald McDiar-mid and Roy J. Schaan, Balta, appearing for subscribers on the Balta Line.

The organization of the company and its membership in the Bell Telephone System is adequately described in our order in Case No. 4772; there appears to be no reason to repeat that detailed description here.

The hearing held on the instant complaint was the third hearing in which we have considered the adequacy of the company's North Dakota intrastate earnings since 1950. On March 1, 1952, the company effected increases in its rates pursuant to our order in Case No. 4772 which, it was believed, would allow the company to earn a reasonable return on its intrastate investment. The reasonableness of the return so produced was examined by this commission at a public hearing on October 9, 1952, less than a year after the rates became effective, upon the company's petition for additional increases in rates. In that Case, No. 4934, this commission realized that additional rate increases were necessary to allow the company to earn a reasonable return on its North Dakota operations. The new increases became effective March 1, 1953. On

September 18, 1953, the company felt compelled to file a petition seeking still further increases in its rates and charges.

The recent rate increases above referred to were limited to amounts deemed minimum by this commission. The increase effected March 1, 1952, was limited to business and toll rates of the company; the increase effected March 1, 1953, was limited to exchange service rates. In each case, however, the company has failed to earn the return which the increases were designed to produce. Indeed, none of the increases produced a return which this commission could conscientiously find to be reasonable. This commission, however, could hardly accurately predict the extent or the limits of the inflation with its spiraling costs which has caused continued deterioration of the company's net revenues.

In previous cases involving the intrastate rates of the company in this state, this commission has approved the company's license contract payments to American Telephone and Telegraph Company, the prices it pays for supplies and equipment purchased from the affiliated Western Electric Company, and the company's pension accrual plan. At the hearing, the company submitted evidence on its current license contract payments and the costs incurred by A.T.&T. Company in supplying services to it under the contract. The evidence also compares Western Electric prices with those of other suppliers of similar equipment and sets forth the profits realized by that company on its business with affiliated operating companies. The company also submitted the details of its pen-

RE NORTHWESTERN BELL TELEPH. CO.

sion plan to support the pension expense shown on its books and records.

The company also placed in evidence exhibits showing the current operating level of its intrastate operations and of its net investment for the annual period ending June 30, 1953, for the year ending December 31, 1953, and estimations for the period ending December 31, 1954.

From the evidence of record, the commission makes the following:

Findings of Fact

[1-5] (1) That the company's license contract payments, Western Electric prices, and the company's pension expense are reasonable.

(2) That the separation procedures employed by the company to allocate plant, equipment, and costs between intrastate and interstate operations are those adopted and promulgated by the National Association of Railroad and Utilities Commissioners and the Federal Communication Commission and are fair and reasonable.

(3) That the company, after two months of bargaining with the union representing its employees, granted a wage increase which increased its intrastate operating costs approximately \$200,000 annually.

(4) That the company has sustained increased operating costs in the past year in the form of higher property taxes and higher depreciation expense.

(5) That an allowance of cash working capital in the rate base of \$225,000, as developed by the commission's staff, recognizes the company's employment of tax accruals as working capital and properly includes only that amount furnished by investors.

(6) That American Telephone and Telegraph Company computes and pays its federal net income tax on a consolidated Bell System basis which reduces the tax liability of the system; that it is therefore proper to reduce the company's recorded federal income tax to reflect the benefit accruing to it as a member of the Bell System in the amount of \$16,921.

(7) That a reduction of the current federal corporate income tax of 52 per cent to 47 per cent, as scheduled under present statutes to occur on April 1, 1954, is extremely unlikely and may be disregarded in this proceeding.

(8) That the company's capital costs have increased approximately .5 per cent during the past year.

(9) That the present intrastate rates and charges of the company will produce earnings of less than 4½ per cent, measured by the June 30, 1953, rate base of \$19,976,149. This is computed by annualizing on a pro forma basis the company's actual operating results for the 12-month period ending June 30, 1953.

(10) That the company's net intrastate investment in North Dakota as of December 31, 1953, is as follows:

Book cost of plant and equipment	\$25,633,471.00
Less: Depreciation reserve	5,250,401.00
Net book cost	\$20,383,070.00
Materials and supplies	328,108.00
Cash working capital	225,000.00
Net intrastate investment ..	\$20,936,178.00

(11) That the company's intrastate operations in North Dakota for the year ending December 31, 1953, adjusted to reflect current rate and expense levels, would produce net earnings of \$897,093.

NORTH DAKOTA PUBLIC SERVICE COMMISSION

Conclusions of Law

(1) That Northwestern Bell Telephone Company is a telephone utility furnishing communication service within the state of North Dakota whose rates and charges therefor are under the jurisdiction of this commission;

(2) That the current rates and charges of the company are unjust and inadequate to yield a fair return on the money it has prudently invested in the state of North Dakota;

(3) That the schedule of rates set forth in Appendix "A," [omitted herein] hereto attached and made a part hereof, are just and reasonable.

ORDER

Now, therefore, it is *ordered* that Northwestern Bell Telephone Company be, and hereby is, authorized:

(1) To charge rates for local exchange telephone service, as set forth in Appendix "A" hereof [omitted herein], effective with regular bills for telephone service dated on and after January 4, 1954.

(2) To charge 10 cents for local messages from all public or semipublic telephones as soon after January 4, 1954, as station equipment can be adapted for such charges.

(3) To charge the average daily

local message guarantee for semipublic telephone service as set forth in Appendix "A" hereof [omitted herein], effective on and after the first regular billing date subsequent to January 4, 1954.

(4) To charge rates for message toll telephone service, as set forth in Appendix "A" hereof, effective after 12:01 A.M., local standard time, January 4, 1954.

It is *further ordered* that local exchange telephone rates, as set forth in Appendix "A" hereof [omitted herein], shall not apply in manual magneto exchanges, provided that said local exchange telephone rates shall become effective on the first regular billing after conversion of said exchanges to dial or common battery operation.

CART, Commissioner, dissenting in part: The rates prescribed in Appendix "A" hereof will produce additional gross revenues of approximately \$227,000 more than is required in my opinion, to provide a reasonable rate of return to the company on its net intrastate investment as set forth in Finding No. 10 hereof. While I agree that a need for further rate increases has been shown, I cannot concur in paragraphs 1 and 4 of the order herein.

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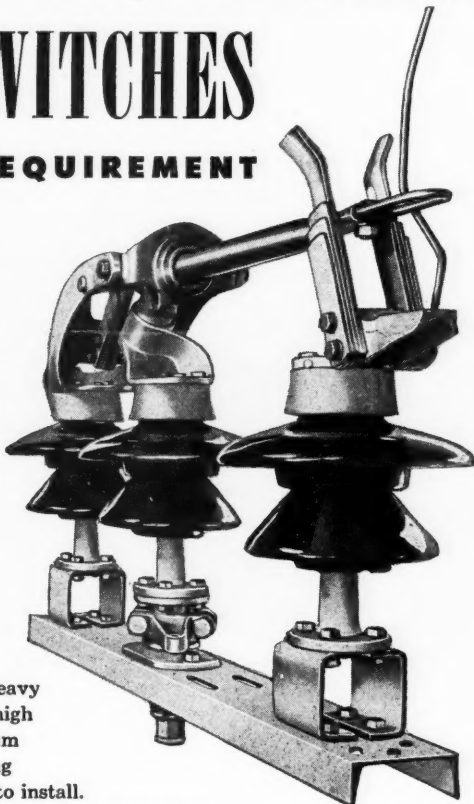
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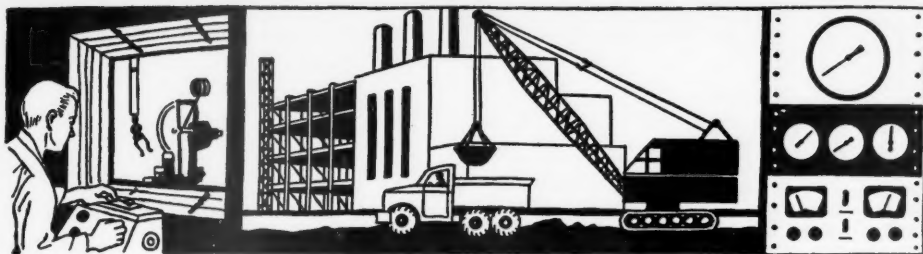
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PUBLIC UTILITIES FORTNIGHTLY



Industrial Progress

Edison of N. Y. to Spend \$75,000,000 in Next Five Years

THE Consolidated Edison Company of New York, Inc., will spend approximately \$375,000,000 over the next five years for new construction and improvements to its properties, according to the company's annual report.

Last year the company spent \$88,000,000 on expansion and has budgeted \$90,000,000 for the same purpose this year, according to Hudson R. Searing, president. The principal operating event in the Edison system in 1963 occurred last fall when the first 10,000 kilowatt unit of the new Asia electric generating station was placed in operation. The ultimate generating capacity of this station may exceed 1,000,000 kilowatts, Mr. Searing said.

Sangamo to Manufacture Power Factor Correction Capacitors

PLANS to manufacture power factor correction capacitors were announced recently by the Sangamo Electric Company, Springfield, Illinois. Although known in the electric utility industry primarily as manufacturers of watt-hour meters, Sangamo has been in the electronics capacitor business continuously for the past thirty years. They are now a major supplier of mica, electrolytic, and paper capacitors in the electronic industry and military agencies and own and operate a capacitor plant in Marion, Illinois.

C. H. Lanphier, executive vice president of Sangamo, stated that by applying equipment for the control of power factor capacitors, such as time switches and thermal relays, he has given us a good insight in the application problems of our utility customers. Available engineering and manufacturing facilities at our

Marion plant, together with our desire to extend our range of services and products to the utility industry, makes our entry in this kindred field a logical move."

Sangamo will handle sales through their utility sales organization at Springfield, while manufacture of the new capacitors will be at the Marion plant. Actual production is not expected for about a year.

Coast Counties Gas & Elec. Wins Advertising Award

THE Coast Counties Gas and Electric Company was awarded national recognition recently for the excellence of its advertising during the past year. At a luncheon held in the company's honor at the St. Francis Hotel, San Francisco, officials of the Coast Counties Gas and Electric Company and its advertising agency, The McCarty Company, were presented with plaques representing first prize nationally in the Local Outdoor Advertising Awards Contest, sponsored annually by the Outdoor Advertising Association of America, Inc., the national trade association of the outdoor advertising industry. The firm's advertising was selected for this honor from thousands of entries from all over the United States. C. Robert Leach, account executive for Foster and Kleiser Company, presented the awards on behalf of the Association.

The national first prize in the Continuous Poster Advertising Campaign division of the competition was received on behalf of Coast Counties Gas and Electric Company by Richard L. Hayden, vice president. Sharing the honors awarded their firm were George Bowersox, regional manager, Louis Wollenberger, sales manager, and Clifford R. Hayden, regional sales manager.

As the creators of the utility's prize winning "Go Modern—Use Gas"

campaign, plaques were awarded to Willard Wilde, San Francisco manager, and Frank Johnson, account executive, representing the San Francisco office of The McCarty Company.

Central Vermont Public Service To Construct 43 Miles of Line

CONSTRUCTION this year of a 115,000 volt north-south electric transmission line connecting the former Public Electric Light Company area in northwestern Vermont with Central Vermont Public Service Corporation's 44,000 volt main transmission system was announced recently by President Albert A. Cree.

This project involves 32 miles of 115,000 volt line—the first such high voltage line in Vermont—and 11 miles of 69,000 volt line, the highest present voltage in the state.

The new line and related substation facilities at Middlebury, Essex Junction and Milton will cost approximately \$935,000.

(Continued on page 28)

openings for PUBLIC UTILITY SYSTEMS & METHODS MEN

Established New York engineering and consulting firm has openings for men experienced in utility systems and methods.

Applicants must be interested in training and development for work in the study, design and installation of **ELECTRONIC DATA PROCESSING** systems in accounting and related fields.

Write giving experience, age, earnings, etc.

ADDRESS BOX 415
PUBLIC UTILITIES FORTNIGHTLY
309 Munsey Bldg., Washington 4, D. C.

\$147,000,000 Construction Program Proposed by Pennsylvania P. & L.

PENNSYLVANIA Power and Light Company plans to spend \$147,000,000 on construction in the next five years. The company has spent nearly \$247,000,000 for expansion since 1946.

New, Improved Intake-Exhaust Silencers

TWO new series of silencers for quieting the noise produced by air compressors, blowers, vacuum pumps and other machines expelling high velocity air to atmosphere have been developed by Burgess-Manning Engineers.

To be known as the Series "CA" and "LCA," they are designed for operation under moisture-free air conditions and for temperatures up to 200° F. Special sound absorbing material can be used for operation at considerably higher temperatures.

The "CA" Series is available in pipe sizes up to 6 in., whereas the "LCA" Series is available in sizes larger than 6 in.

These new developments complement the extensive line of silencers and snubbers of the Burgess-Manning Company, which range from small units slightly larger than the human hand up to giants measuring 75 feet in length. What is believed to be the largest Silencer ever built was designed recently by Burgess-Manning to silence the exhaust of a 5000 kw single cycle gas turbine generating unit installed at a mid-western utility company. It measures 74 feet long by 12 feet in diameter, and has an estimated weight of 70,000 pounds.

Elliott **ADDRESSING MACHINES**

offer you the only competition you can find in the Addressing Machine industry. Consult your yellow telephone book or write to The Elliott Addressing Machine Co., 144B Albany St., Cambridge 39, Mass.

Literature is available and may be had by writing directly to H. A. Dietrich, Burgess-Manning Company, Libertyville, Illinois.

Linemen's Rain Suits Described in Catalog

LIFE Guard rain suits and accessories for utility men, outdoor service crews, highway crews, etc., described in a catalog issued by John E. Dorsey Company, distributors.

The suits are lightweight and guaranteed waterproof. It is claimed that they never crack or deteriorate when stored away and offer complete protection for as long as 10 years.

The catalog may be obtained from John E. Dorsey Company, 80 K street, Boston 27, Mass.

Worthington Issues New Bulletin On Industrial Equipment

A NEW bulletin on industrial equipment is being offered by Worthington Corporation.

The bulletin contains information about special features, types, sizes and capacities of Worthington's various product lines of industrial equipment, and describes the application of each of these lines in various industries.

A number of illustrations show, as representative samples, how Worthington products apply in different types of industry.

For additional information or copies of this bulletin specify Bulletin WP-1099-B61, and direct requests to Advertising and Sales Promotion Department, Worthington Corporation, Harrison, N. J.

\$105,570,000 Program Planned By Alabama Power

THE Alabama Power Company plans to spend \$105,570,000 on expansion during the next two years. This sum, added to the money spent in expansion since 1946, totals \$326,000,000. The figure does not include \$100,000,000 for further development of the Coosa river.

The construction program of \$44,000,000 spent in 1953 was the greatest for any one year in the company's history.

Pacific Gas & Electric Has \$170,000,000 Program

THE Pacific Gas and Electric Company spent \$197,800,000 last year for new construction purposes, bringing the total since the close of World War II to \$1,174,370,000.

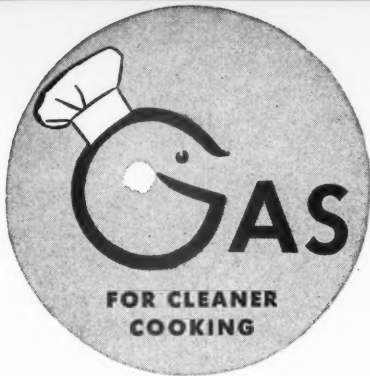
New construction this year is expected to total \$170,000,000.

New Insulated Terminal for Large Size Wire

A NEW insulated terminal for users of heavy duty wire has been developed by Aircraft-Marine Products Inc., 2100 Parton Street, Harrisburg, Pennsylvania.

The manufacturer states that this new terminal known as "Ampli-Bond" gives a positive and complete bond of the insulation to the terminal sleeve, insures uniform insulation thickness under confined crimping pressure, therefore transmits this pressure evenly to the center of the crimp area. Insulation designed to extend into

(Continued on page 30)



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Columbia Gas System
delivers a modern miracle
24 Hours-A-Day!

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CUT HIGH LINE OPERATION COSTS

In Rugged, Hard-To-Reach Areas

Many power companies operating in rugged regions are finding they can noticeably reduce their high line servicing costs by equipping their Jeeps with KOENIG All-Steel Cabs.

This ruggedly braced KOENIG Cab is of all-steel, welded construction. Special top reinforcing will easily support a platform to hold an average weight man and instruments for survey or repair work in hard to reach regions.

All KOENIG Cabs are insulated with air-spaced panel board top lining for greater all-weather comfort.

The KING Model R-100-J Front-Mount Winch Assembly on your utility Jeep helps get you in and out of otherwise inaccessible places, too, for fast emergency line service. Immediate delivery on cabs and winch assemblies from most Willys-Overland outlets.

Hundreds of KING Front-Mount Winch Assemblies are in service on 1/4-2 1/2 ton public utility trucks engaged in cable stringing, setting equipment, and emergency repairing in rugged regions. Standard "factory-fit" installations for all popular trucks.

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ASSEMBLY**

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IRON WORKS

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INDUSTRIAL PROGRESS

(Continued)

imum distance beyond terminal barrel, provides maximum permanent support and allows the use of large wire in restricted areas. Completely separate metal ring grips wire insulation, prevents exposure of conductor during sharp bends and cable fatigue caused by excessive flexing and vibration. This non-conducting ring forms a barrier to foreign objects coming in contact with current carrying members. A tough vinyl insulation is used that will withstand a minimum of 60 volts, which is four times the military specification for insulated terminals.

Complete information and further details may be obtained from the manufacturer.

Oklahoma Gas & Electric to Spend \$19,800,000 This Year

OKLAHOMA Gas and Electric Company spent \$1,131,000 on construction in 1952 and \$12,066,000 in 1953. The company has announced plans to step up its building program to \$19,800,000 this year.

Major project is continuation of work on a new 11,000-kw generator, scheduled to go into service in the summer of 1955, doubling the capacity of the Mustard power plant near Oklahoma City. Also scheduled for this year is a 50-mile 154,000-volt transmission line to reinforce service to eastern Oklahoma and Arkansas.

\$231,000,000 Spent by Duke Power in 8 Years

DUKE Power Company spent about \$231,000,000 on plant additions in the eight years, 1946-53. About \$400,000 was spent in 1953.

A new 250,000 kw generating unit was put into service in the fall of 1953, while two units aggregating 266,000 kw are scheduled for completion this year and a 150,000 kw unit is under construction for use in 1955.

Long Island Lighting Has \$46,000,000 Program

LONG Island Lighting Company has reported expenditures of \$49,258,000 for new facilities in 1953. Since expenditures since the end of World War II have amounted to \$211,000,000. Further construction for this year are estimated at \$46,000,000.

A-C Announces New Selling Technique For Feeder Regulators

CONVINCED that there are many utilities not fully aware of the potentialities of distribution type feeder voltage regulators, Allis-Chalmers is bringing a new merchandising technique into the major electrical equipment industry. Upon request, a JFR (pole-type) distribution regulator will be delivered for 30-day inspection without cost to any recognized distribution system.

"We are making this offer," said G. W. Clothier, manager, transformer section, "because we know there are a great many distribution systems that have not yet investigated distribution type regulators. The best way we can prove the new pole-type regulators are the equivalent of station regulators in construction and service is to make it easy for the distribution engineer to see for himself."

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A 7,000,000 HP Success Story

Interior view of spiral casing at Norris Dam

Achievements of Newport News personnel in designing and building water power equipment during the past thirty years reflect a high integration of skill and production facilities.

Answering demands for hydraulic turbines rated as high as 165,000 horsepower and as low as 500 horsepower, this trained organization has successfully filled contracts with an aggregate

rated output in excess of 7,000,000 horsepower.

Other essential equipment including penstocks, spiral casings, valves, pumps, gates and rack rakes are also designed and built by Newport News.

An illustrated copy of our booklet entitled, "WATER POWER EQUIPMENT," will be sent to you upon request.

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Keeps 4 Backfillers Busy

IN OMAHA, NEBRASKA, the Metropolitan Utilities District keeps 4 CLEVELAND Backfillers busy on construction jobs for gas, sewer and water lines.

The photograph shows how easily the Model 80 Backfiller is operated by only one man. It also shows how the 80, traveling parallel to the trench as it works, holds to an absolute minimum any interference with the highway's normal traffic capacity.

The 80 is not only cleanly filling this good sized trench, it is also compacting it simultaneously with its tamper unit, a standard accessory feature of this versatile machine. The results it is obtaining clearly illustrate its ability to backfill fast and efficiently

and at the same time do an outstanding job of compacting the fill. Traveling continuously as it performs both these operations, it conserves on manpower and eliminates the need for attendant equipment.

In addition to backfilling and compaction these Model 80's do side crane work of all kinds, such as the handling and installation of cast iron, steel and concrete pipe, valves, etc.

The repeated purchases of these machines by this municipal utilities body are evidence of the Model 80's ability to deliver consistently satisfactory results through consistent, outstanding performance on a wide variety of job types and sizes.

Write for descriptive literature and specifications, or get the full story on CLEVELANDS from your local distributor.



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INDUSTRIAL PROGRESS (Continued)

New I-T-E System Analyzer Feature High Accuracy, Speed

A NEW line of Power System Analyzers has just been announced by the I-T-E Circuit Breaker Company, Philadelphia. According to the announcement, utilities, consulting engineers, industrial, and university will find this new equipment a valuable aid in obtaining rapid, reliable solutions to the complex problems resulting from the continued expansion and interconnection of electric power systems.

The I-T-E System Analyzer is a compact design using conventional 60-cycle power supply. Equipment characterized by many advanced features combined to give high accuracy, speed of setup and operation, and low maintenance.

For details, write to Switchgear Division, I-T-E Circuit Breaker Company, 19th and Hamilton streets, Philadelphia 30, Pa.

Columbus & Southern Elec. Spend \$23,114,275 in 1954

COLUMBUS & Southern Electric Co., Columbus, Ohio, will spend \$114,275 during 1954 to increase and expand its facilities, according to B. Poston, president.

Of that sum, \$10,180,100 will be spent for additions to the Picway Poston generating plants; \$5,231,000 for transmission system improvements in the company's 22-county generating area; \$6,930,250 for distribution improvements; and \$772,875 for general plant additions. Addition of a fifth unit in the Picway generating plant and of the fourth unit at the Poston plant will require most of the \$1,000,000 allocated for general additions.

A-C Releases New Feeder Voltage Regulator Bulletin

ENGINEERING details of A-C Chalmers transformer type 8% feeder voltage regulators (Type AFR) are described in a new page bulletin released by the company.

The bulletin sets forth the advantages of unit-type construction, and of the exclusive features of A-C regulators 750 kva and below. It tells why the unit's shock-absorbing, quenching tap-changing mechanism is built to withstand severe operating conditions without servicing. It explains how its "Feather-Tone" automatic control and voltage inter-

(Continued on page 34)

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6 models with Service-Utility bodies. 77-inch body lengths for 115-inch wheelbase models, 89-inch lengths for 127-inch wheelbase models. GVW ratings, 4,200 to 6,500 lbs.

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You save, second, because they take the workshop right to the job. Workmen have everything they need—right with them—on every service call. Vise brackets, pipe supports and ladder racks are

available as optional equipment. With Service-Utility bodies you reduce mileage and wage costs caused by job-to-shop trips for needed items.

You save, third, because INTERNATIONAL engineering and design—the same as that which has made INTERNATIONAL the heavy-duty sales leader for 22 straight years—gives you long truck life, lowest operating and maintenance costs.

It will pay you to check into the many advantages afforded by INTERNATIONAL Trucks with Service-Utility bodies. Time payments arranged. Get full details from your INTERNATIONAL Dealer or Branch.

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tor gives simple and close control.

Copies of "Allis-Chalmers Power Regulators," O1B6056D, are available on request from Allis-Chalmers Manufacturing Company, 965 S. 70th street, Milwaukee, Wis.

G-E Announces New Substation-Size Transformer

A NEW substation-size transformer featuring a new cooling method, and reductions in weight and height has been announced by the General Electric Company's Distribution Transformer Department, Pittsfield, Mass.

The new cooling method utilizes chimney-type radiators instead of numerous tubes. G-E engineers said the chimney construction allows a lower height design, and a reduction in weight, without any sacrifice in the electrical characteristics of the transformer. Weight of the transformer has been reduced more than 6 per cent and height 2½ feet or more than 30 per cent.

The unit has large smooth surfaces instead of numerous smaller round surfaces, making it easier to paint. A reduction in the number of openings into the transformer tank adds to its strength and tightness.

The new transformer is available in ratings of 250-kva, high voltage 15,000 volts and below. Other ratings will be added in the future.

Citizens Utilities Wins "Joshua" For Match Book Advertising

CITIZENS Utilities Company, Greenwich, Connecticut, has been awarded a bronze "Joshua" plaque for the most distinguished use of match book advertising in the utilities industry in 1953, Charles Furcolowe, director of the Match Industry Information Bureau has announced. William J. Ierardi, executive assistant of Citizens Utilities, was responsible for the winning match book entry.

A panel of outstanding leaders in advertising selected the company's match book as best in its field among the nearly 300,000 American business concerns which used the medium last year.

Award certificates were voted by the judges to Howard H. Roth & Company—Public Utility Forestry, St. Petersburg, Florida; Consolidated Edison Company of N. Y., Inc.; North State Telephone Co., High

Point, North Carolina; and Southern Bell Telephone Co., St. Louis, Missouri.

New Straight Line Strain Clamp Offered by Brewer-Titchener

A NEW BTC straight line strain clamp for use on A.C.S.R. and aluminum conductor has been announced by The Brewer-Titchener Corporation, Cortland, New York.

Primarily designed for use on distribution, light transmission and substation networks, this clamp has bore size range of 0.46-0.90", holding all conductors within its bore size range including copper, all-aluminum 18 x 1 and other A.C.S.R. conductors.

This short, lightweight high strength clamp can be supplied with either a drop-forged aluminum steel body and drop-forged steel keeper. The assembly may be supplied with a drop-forged socket adapter. Use of copper or aluminum liners is recommended in steel clamps.

Brookville Mfg. Producing All-Steel Insulated Buildings

THE Brookville Manufacturing Company is now manufacturing and supplying all-steel fully-insulated structures of a design similar to the Universal Buildings formerly produced and sold by Blaw-Knox Company, Pittsburgh, Pennsylvania, according to an announcement by Paul L. Erdner, president of Brookville Manufacturing. The firm has also completed arrangements to meet the future servicing and expansion needs of users of existing Blaw-Knox Universal Buildings.

The arrangement between the two companies, according to Mr. Erdner will benefit users of existing Universal Buildings by providing continuous servicing of their structures, and extension where desired. It should also prove of advantage, Mr. Erdner said to Brookville's customers, who will have a source giving undivided attention to the prefabricated steel building field.

National City Bank Appoints

W. HOWARD MILLER has been appointed an assistant vice president of the National City Bank of New York, according to a recent announcement.

Mr. Miller will be associated with the Public Utilities unit of National City's Special Industrial Group.

This announcement appears only as a matter of record.

Electric Energy, Inc.

\$65,000,000

3¾% First Mortgage Sinking Fund Bonds

Due June 1, 1982

\$30,000,000

4½% First Mortgage Sinking Fund Bonds

Due December 1, 1979

Pursuant to agreements dated October 29, 1952, and July 9, 1953, certain institutional investors agreed to purchase, and have purchased in part, the above-described Bonds. In addition, arrangements were made with certain banks for interim credits aggregating \$32,000,000. All the above financing was negotiated through the undersigned.

Electric Energy, Inc. was formed to generate and supply electric power to the Paducah project of the United States Atomic Energy Commission. It is owned by Union Electric Company of Missouri, Central Illinois Public Service Company, Illinois Power Company, Kentucky Utilities Company and Middle South Utilities, Inc.

Kuhn, Loeb & Co.

March 30, 1954

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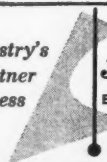
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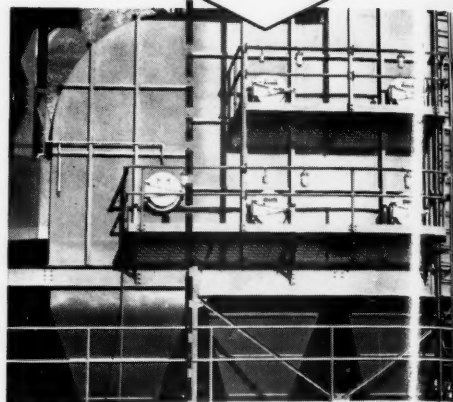
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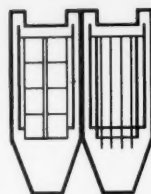
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